

THE
United Planters' Association
OF
Southern India

(INCORPORATED).

♦ ♦ ♦ ♦ ♦

TWENTY-SECOND ANNUAL GENERAL MEETING

HELD AT

BANGALORE

ON

16th, 17th, 18th and 19th August, 1915.

With an Appendix.

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Madras:

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1915.

THE
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Southern India
(INCORPORATED).

LICENSE FROM THE GOVERNMENT OF MADRAS.

Dated 22nd April, 1899.

LICENSE.

Whereas "The United Planters' Association of Southern India (Incorporated)" is an Association which is registerable under the Indian Companies' Act, 1882, as a Limited Company, and whereas it has been proved to the satisfaction of the Governor in Council that it is formed for the purposes set forth in the Memorandum of Association, and that it is the intention of the Association to apply the profits and income of the Association to promote those purposes, and that payment of any dividend to its members is prohibited by the fourth article of the Memorandum of Association, His Excellency the Governor in Council is pleased to direct under the provisions of Section 26 of the said Act, that "The United Planters' Association of Southern India (Incorporated)" shall be registered with limited liability, but without the addition of the word "limited" to its name.

THE United Planters' Association OF Southern India

(INCORPORATED).

ESTABLISHED 1894—INCORPORATED 1899.

District Planters' Associations represented.

ANAMALAI PLANTERS' ASSOCIATION	...	...	<i>Anamalais.</i>
BABABUDIN PLANTERS' ASSOCIATION	...	...	<i>Mysore.</i>
CENTRAL TRAVANCORE PLANTERS' ASSOCIATION	...	...	<i>Travancore.</i>
COORG PLANTERS' ASSOCIATION	...	...	<i>Coorg.</i>
KANAN DEVAN PLANTERS' ASSOCIATION	...	...	<i>Travancore.</i>
MUNDAKAYAM PLANTERS' ASSOCIATION	...	...	<i>Travancore.</i>
NILGIRI PLANTERS' ASSOCIATION	...	...	<i>Nilgiris.</i>
NORTH MYSORE PLANTERS' ASSOCIATION	...	...	<i>Mysore.</i>
SOUTH MYSORE PLANTERS' ASSOCIATION	...	...	<i>Mysore.</i>
SOUTH TRAVANCORE PLANTERS' ASSOCIATION	...	...	<i>Travancore.</i>
SHEVAROY PLANTERS' ASSOCIATION	..	...	<i>Shevaroy's.</i>
WEST COAST PLANTERS' ASSOCIATION	...	...	<i>Cochin, etc.</i>
WYNAAD PLANTERS' ASSOCIATION	...	...	<i>Wynaad.</i>

Executive, 1915-16.

Chairman.—C. H. BROWNE, *Kerkie Coondah Estate, Sallebile, Kadur District.*

Vice-Chairmen.— $\left\{ \begin{array}{l} \text{H. WADDINGTON, } \textit{Pullangode Estate, Pullangode P. O., via Manjeri, Malabar.} \\ \text{J. S. NICOLLS, } \textit{Daverashola Estate, Daverashola P. O., Nilgiris.} \end{array} \right.$

Council.—The Chairman, *ex-officio*; the Vice-Chairmen, *ex-officio*; the Association's Representative on the Legislative Council of Fort St. George; the ex-Chairman (Chairman during the previous year); and the Honorary Secretaries of the respective District Planters' Associations (or such other Representatives as these Associations may from time to time appoint).

Secretary.—FLETCHER NORTON, *Bangalore.*

Representatives on the London Chamber of Commerce.

1913-1915...GUY OWEN.
 1912-1913...JNO. C. SANDERSON and GUY OWEN.
 1902-1912...JNO. C. SANDERSON.
 1901-1902...JNO. C. SANDERSON and BROOKE MOCKETT.
 1897-1901...JNO. C. SANDERSON.
 1896-1897...JNO. C. SANDERSON and FRANK MANGLES.
 1895-1896...JNO. C. SANDERSON.

Representative on the Legislative Council of Fort St. George.

The Hon'ble Mr. E. F. BARBER, *Ootacamund*.

Former Chairmen and Vice-Chairmen.

Chairmen.

1894-1895...Mr. DIGBY T. BRETT.
 1895-1896...Mr. W. H. SPROTT.
 1896-1897...Mr. G. L. ACWORTH.
 1897-1898...Mr. GEO. ROMILLY.
 1898-1899...Mr. GEO. ROMILLY.
 1899-1900...Mr. W. H. SPROTT.
 1900-1901...Mr. H. P. HODGSON.
 1901-1902...Mr. ROBERT GOMPERTZ.
 1902-1903...Mr. J. A. HARRIS.
 1903-1904...Mr. GEO. ROMILLY.
 1904-1905...{ Mr. H. M. KNIGHT.
 { Mr. G. K. MARTIN.
 1905-1906...Mr. W. H. SPROTT.
 1906-1907...{ Mr. J. A. HARRIS.
 { Mr. AYLMER MARTIN.
 1907-1908...Mr. C. E. ABBOTT.
 1908-1909...Mr. J. G. HAMILTON.
 1909-1910...Mr. J. A. RICHARDSON.
 1910-1911...{ Mr. R. D. TIPPING.
 { Mr. C. H. BROCK.
 { Hon'ble Mr. J. G. HAMILTON.
 1911-1912...Mr. C. E. ABBOTT.
 1912-1913...Mr. C. E. ABBOTT.
 1913-1914...Mr. E. L. MAHON.
 1914-1915...Mr. J. A. RICHARDSON.

Vice-Chairmen.

Mr. G. R. EVANS.
 Mr. J. W. HOCKIN.
 Mr. J. G. HAMILTON.
 Mr. H. G. PARSONS.
 Mr. J. C. ABBOTT.
 Mr. J. W. HOCKIN.
 Mr. A. LAMBERT.
 Mr. J. A. HARRIS.
 Mr. E. G. WINDLE.
 Mr. O. SCOTT-SKIRVING.
 } Mr. G. K. MARTIN.
 Mr. C. E. ABBOTT.
 } Mr. AYLMER MARTIN.
 Mr. J. G. HAMILTON.
 Mr. J. A. RICHARDSON.
 Mr. BERNARD MALCOLM.
 } Mr. C. H. BROCK.
 { Mr. E. F. BARBER.
 { Mr. A. FF. MARTIN.
 { Mr. E. L. MAHON.
 { Mr. E. A. HUGHES.
 { Mr. E. A. HUGHES.
 { Mr. W. L. CRAWFORD.
 { Mr. J. A. GRAHAM.
 { Mr. C. H. BROCK.

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 and
 25, SOUTH PARADE, BANGALORE

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The United Planters' Association

OF

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(INCORPORATED).

THE ANNUAL MEETING.

First day, Monday, August 16th, 1915.

The Twenty-second Annual Meeting opened at Bangalore, in the Mayo Hall, at 3 P.M., on 16th August, 1915.

The following were present:—

<i>Chairman</i>	...	Mr. J. A. RICHARDSON.
<i>Scientific Officer</i>	...	Mr. R. D. ANSTEAD, M.A.
<i>Planting Member of Council</i>	...	The HON'BLE Mr. E. F. BARBER.
<i>Director, Labour Dept.</i>	...	Mr. AYLMER FF. MARTIN.
<i>Secretary</i>	...	Mr. FLETCHER NORTON.

Delegates.

<i>Anamalais</i>	...	{ Mr. SIMCOCK. Mr. CARLESS.
<i>Bababudin</i>	...	{ Mr. BOYD. Mr. DENNIS.
<i>Central Travancore</i>	...	Mr. WINTERBOTHAM.
<i>Coorg</i>	...	{ Mr. TIPPING. Mr. G. R. PEARSE.
<i>Kanan Devan</i>	...	{ Mr. W. A. LEE. Mr. A. J. WRIGHT.
<i>Mundakayam</i>	...	Mr. MURPHY.
<i>Nilgiris</i>	...	{ Mr. NICOLLS. Mr. DANDISON.
<i>North Mysore</i>	...	{ Mr. C. H. BROWNE. Mr. DANVERS.
<i>Shevaroyas</i>	...	Mr. TURNER.
<i>South Mysore</i>	...	Mr. HAYWARD.
<i>West Coast</i>	...	{ Mr. WADDINGTON. Mr. MORRELL.
<i>Wynaad</i>	...	{ Mr. B. MALCOLM. Mr. N. C. WHITTON.

Mr. J. G. HAMILTON was present and voted as an *Ex-Chairman*.

Visitors.

Sir HUGH DALY, K. C. I. E., C. S. I.	Mr. NEWMAN SANDERS (Messrs. Richardson & Cruddas, Madras).
Sir M. VISWESWARAYA, K. C. S. I., C. I. E., M. I. C. E., Dewan of Mysore.	Mr. J. A. R. LLOYD.
Mr. D. T. CHADWICK, I. C. S.	Mr. A. PELL.
Mr. HANNYINGTON, I. C. S.	Mr. A. R. COX, I. C. S.
Mr. DOVE WILSON.	Dr. L. C. COLEMAN.
Mr. E. H. F. DAY (Deputy Di- rector, Labour Department, on duty).	Mr. PETRIE HAY.
Mr. W. O. WRIGHT (Messrs. Parry & Co.).	Mr. A. K. MENON.
Mr. W. K. M. LANGLEY (Messrs. Peirce, Leslie & Co., Ltd.).	Mr. L. P. KENT.
Mr. J. W. KEITH (Messrs. Parry & Co.).	Mr. W. SINCLAIR JOHNSON.
Mr. H. KERR.	Mr. HARRISON.
Mr. A. C. W. DENNE.	Mrs. G. R. PEARSE.
Mr. D. JAMES DALGARNE.	Mrs. A. F. MARTIN.
Mr. R. D. ARBUCKLE (Messrs. Marshall, Sons & Co., Ltd.).	Mrs. TIPPING.
	Mrs. ANSTEAD.
	Mrs. DANDISON.
	Mrs. BROWNE.
	Mrs. BARBER.
	Mrs. HARRISON.
	Mrs. WINTERBOTHAM.
	Mrs. WHITTON.
	Mrs. GUY TURNER.

The CHAIRMAN, in opening the Proceedings, prefaced his remarks, by reading the following letter, received from Mr. C. H. Brock, one of the Vice-Chairmen of the Association, who is now serving with one of the Frontier Regiments at Peshawar :—

PESHAWAR,
N.-W. Frontier Province,
11th August, 1915.

MY DEAR RICHARDSON,

I hope this will reach you on the opening day of the U. P. A. Meeting, and I wish you a successful and a profitable one. My thoughts will be with you, and I only wish I could be present at it, but no one here is allowed to go further than twenty-four hours recall. I am glad to see from the *Planters' Chronicle* that there are so many South India planters "doing their bit," and those who are still with you are useful, for there must be many of you who are doing the work of those who are on active service as well as your own, and I am proud of being one of a community who have risen to the necessities of the crisis so thoroughly. Best of all good wishes to old friends and for a successful Meeting.

Yours sincerely,

C. H. BROCK.

THE ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN, — When we met and parted a little over a year ago, none of us foresaw that a War unparalleled in history was about to involve not only the whole civilised world, but nations whose names are almost unpronounceable. On the one hand, the British Empire and her Allies are fighting to uphold liberty with the fixed and noble resolve to win against a nation that is imbued with every idea that is ignoble, brutal and savage. A Resolution will be proposed supporting the temperate though strongly worded remonstrances of various bodies in India at the continued and misjudged leniency meted out to alien enemies in India and demanding their instant internment.

A list of Members of Planters' Associations in Southern India who have responded to the call to arms is circulated and up to the date of my report I have to report with deep regret the death of Captain Milbank, of Mundakayam, who died of wounds received on Hill 60; and the wounding of Lieut. Hill, of South Mysore, in Persia and Lieut. Dixon of the High Range. I also have to record with regret the deaths of such well-known planters as Mr. H. G. Grant and Mr. G. C. Garrett, Mr. F. Short and Mr. E. M. Playfair.

Mr. CARSON PARKER having resigned his seat on the Indian Tea Cess Committee, the Hon'ble Mr. Barber kindly consented to fill the vacancy.

Very soon after War was declared, very considerable financial difficulties arose in the matter of credits from Home, but a Meeting convened by Mr. Richardson, which was attended by Members of various Associations and representatives of Firms interested in the Planting Industry, discussed the situation, interviewed the Exchange Banks and considerably eased the situation.

The work of the Association has been going on steadily and satisfactorily, and the clerical work connected with it has much increased.

There were two Committee Meetings held in Madras in connection with the Labour Department and Scientific Department. At the former the position and work was discussed and rules drafted. I have the pleasure to report that of the 100,000 acres originally aimed at, we have 98,250 acres and with new clearings being opened, I have no doubt but that that acreage will be exceeded.

The Scientific Department Scheme was thoroughly discussed and a pamphlet issued to every member of the Association and to Firms and friends interested in the various industries. The scheme and the Committee's recommendations will be placed before you for your acceptance. The offer of the Madras Government is too generous to be lightly rejected, and it will be found that the Association can just afford to put up the Rs. 10,000 required. Outside subscriptions have been invited, and the responses received show the greatest sympathy with the object but unanimously declare "that the moment is inopportune," to ask for outside help, as so many calls are being made on financial resources on every side. This I am sure you will all understand and appreciate. It is for the Association to take up the burden and wait till the clouds lift before again applying for outside support.

From replies received from Government, the Pest Act will be drafted on the lines of the Madras Cattle Diseases Act and there will still be some delay before it is introduced.

The report of the Committee, appointed to examine the question of the standardisation of weights and measures, before whom Mr. Martin appeared as your representative, has not yet been issued. Conforming with your instructions, I wrote to the Burmah Chamber of Commerce and said that this Association would support them in their endeavour to procure the Anti-adulteration Act for the whole of India, and I may state that the Bengal, Bombay, Karachi, Punjab and Bengal National Chambers of Commerce have addressed Government and have decided to support the same.

I am sorry to report that the Mangalore-Arsikere Railway for which the South Mysore Planters' Association have so long contended has been abandoned for the time being. Yet another scheme which will connect all the Planting districts will be placed before you for your consideration and support.

At the expressed wish of District Associations, this Association has joined the Rubber Growers' Association, but the parent Association has proposed a scheme by which a small Committee in Southern India should be formed, which would give more weight, rather than becoming mere members. It will be for you to decide if you will accept their suggestion.

The Planters' Benevolent Fund to June 30th, 1915, has Rs. 17,000 invested in Government Paper at $3\frac{1}{2}\%$ held by the Mercantile Bank of India, Ltd., in safe custody, and a balance at the same Bank of Rs. 2,632-1-6. The assistance granted during the year to four applicants amounted to Rs. 1,460. A report of the Benevolent Fund from January 1st, 1914, to 31st December, 1914, is placed before each delegate.

The *Planters' Chronicle* shows a profit of Rs. 948-4-0 against an estimated profit of Rs. 1,500. The falling off of advertisements, due to the War, is the cause of this difference.

The accounts for the year are laid on the table. A comparison of actuals with estimate shows the following result:—

	Estimate.	Actual.
Income ...	Rs. 20,941-6-0	Rs. 20,949-10-10.
Expenditure ...	„ 15,708-0-0	„ 20,256-0-1.

This shows that Rs. 4,548 was spent over the estimate. But this is accounted for by the purchase of a Motor Car for the Scientific Officer for Rs. 4,000 and Rs. 532 for the expenses of the Committee Meetings which were not estimated for in our last Budget.

I have only to add that I have been instructed by the Finance Committee to increase the fixed deposit from Rs. 2,703 to Rs. 15,000.

THE CHAIRMAN'S ADDRESS.

GENTLEMEN,

The Secretary's report has dealt with the work of the past year and I do not intend to take up your time with a long address.

Since we last met in this hall our outlook in life has been upset by the most gigantic and barbarous War that has ever taken place in the world's history.

The British Empire and her Allies have had to face the most unscrupulous and relentless foe whose methods of warfare are a disgrace to a civilised nation.

Even in the remotest part of the Empire the call to arms was met with such whole-hearted response that it shows our determination to utterly crush our enemy.

The Planters of Southern India have done their share as the list before you will prove and which also includes both our Vice-Chairmen elected here last year.

It is with sad regret that I have to report the death of Captain Milbank, a member of our community, who has given his life for his King and Country.

We must not forget to add our tribute to the Indian Troops who have done so much for us and earned undying fame at the front.

During the first few weeks of the War, as was to be expected, there was a certain amount of anxiety regarding the financing of our industry owing to the Exchange Banks refusing to meet Letters of Credit on their London Offices, but this righted itself in a few weeks and matters rapidly resumed their normal state, thanks to those at Home who have guided the finances of the Empire through a most critical time with unprecedented success.

During the year we have also had to mourn the deaths of several well-known Planters:—

Mr. G. C. Garrett, Mr. H. G. Grant, both of Coorg and Mr. Walter Graham of Peermade, and we would tender our sincere sympathy with those they have left behind.

Products.—Tea crops for the year under review have been good and prices have risen higher than for many years past and still continue to remain so.

The consumption of tea in India is increasing which also proves that its value as a stimulating beverage is rapidly being recognised.

Coffee crops last year were very variable, in fact might be classed as poor, but on the other hand prices were good, and still continue so.

Rubber prices have not risen in the same proportion as tea, but are higher than before the War.

The output from Southern India is increasing yearly as more acreage comes into bearing, but the yield per acre is short of what we expected, due entirely, I think, to our climatic conditions.

Our low capital cost per acre, however, which I should say averages between £40 and £50 and a yield of 300 lbs. per acre at an F. O. B. cost of 8d. per pound will show quite a good return to investors even at present prices

Cardamoms.—The crop last year was good, but the market was limited and prices in consequence poor, in fact, I understand large quantities of last year's crops still remain unsold.

I would give one word of warning, however, before closing my remarks on products and that is, that prices for food-stuffs and materials are high at present, but when this terrible War is over, we shall probably have to face a period of depression.

It is only when we come to set our houses in order and count the cost of the War in human life and money, the pinch will come and there will be no exceptions.

It is the duty of Directors of all Planting Companies to keep this before them and make provision for that time.

I do not mean to say that they are to hoard up money, as I think it is the duty of every Company to pay a dividend where possible however small, as it must be remembered some industries are suffering badly, and money is wanted everywhere at present, but substantial sums should be placed to reserve to help tide over that time of depression when it does come as assuredly it will.

As regards the Planting Industry, the War has affected us in many ways. It is true tea and coffee prices are good and rubber has also advanced, but tonnage has been very scarce, and I doubt whether any crops made from April up to date have yet been shipped.

Freights have gone up tremendously and will be a matter for discussion at this Meeting.

Packing materials for tea such as :—tea-lead, hoop-iron, and wire nails have gone to a prohibitive price, and at one time it looked as if they would not be obtainable, and those who did not lay in stocks in the early stages of the War must be paying heavily for these.

We are also very short-handed owing to the number of men who have either gone to the front or joined the Indian Army Reserve of Officers, and it is quite impossible to fill their places at present, and has thrown a heavy responsibility on those who are left behind.

I only intend to touch as briefly as possible on one or two of the subjects of our Meeting, and the first I would mention is the Labour Department.

Last year your Chairman congratulated you on the starting of the Labour Department of this Association, and this year I think I can safely do the same on the success of its first year's work.

The scheme came into being in the face of some very severe criticism—I might even say opposition—and I have no doubt will be the subject of considerable discussion at this Meeting.

There is one thing I want to impress on you all, and especially on non-subscribers to the Labour Department, and that is, that it is not our object to interfere with non-subscribers' labour, and they can rely on getting fair treatment in the case of any dispute arising.

This bogey has been made use of several times lately, but as far as I know we have had no serious complaints, and can assure you, Gentlemen, it is not to our advantage to quarrel with those who, we hope will eventually join, and this has been the policy of the department from the start.

Departmentally we have suffered a good deal through the War and it has been almost impossible to get sufficient suitable men for our various Agencies.

Mr. MARTIN has had a very uphill job to tackle, and it is only his unbounded energy which has enabled him to carry it through.

The department is well established, but if we have not accomplished as much as we expected, we have had difficulties to contend with which were quite unforeseen when we last met here.

During the year several points have been brought up in connection with the Labour Department by local Associations which will no doubt come up for discussion.

I am not going into these in detail now, but will only mention one proposition brought forward by a local Association and that was that unless the Labour Department was entirely severed from the U. P. A. S. I. they would resign their membership.

Well, Gentlemen, the Labour Department is the outcome of many years' work of the U. P. A. and if there is at present any difference of opinion, I feel sure a friendly discussion will smooth away any little difficulty that may exist.

Another most important subject up for discussion this year is the proposed addition to the Scientific Department which was put before us last year but had to be shelved owing to the War.

We are greatly indebted to the Madras Government and to Mr. Chadwick, the Director of Agriculture, for the very liberal offer they have made to the Planting Industry of Southern India and I hope the scheme will meet with the unanimous support of all District Associations.

We are not demanding any further subscriptions, which a great many do not seem to realise, but only a guarantee that District Associations will subscribe their two annas per acre as at present for a period of five years.

If we have this guarantee we can safely accept the terms offered us by the Madras Government.

Government has definitely agreed to accept Rs. 10,000 a year from the U. P. A. in return for which we shall have a complete Scientific Department including a Mycologist, and experimental stations, run for us in a way we could never hope to do on our own account.

The addition of a Mycologist to the staff of the Scientific Department will fill a long-felt want and enable us to deal with pests and diseases, which we have been unable to do so far except by the courtesy of the Madras Government, who have always been ready to help us, or by sending to Ceylon. Ceylon, of course, has been working up their

Scientific Department for years, and has a large fund of information to refer to, but if the new scheme we are now considering goes through, we should soon be able to build up an equally useful department of our own.

It will be a hard fight to find the money but it can be done if we have unanimous support and we can count on a certain amount of help from firms interested in the supplying of manures when things resume normal conditions.

Rubber Growers' Association.—Last year it was decided that the U. P. A. should become a member of the Rubber Growers' Association and our Secretary was instructed to write and find out on what terms we could join.

The correspondence has been circulated to District Associations, and we are asked to appoint a Committee of eight planters, and three or four members of commercial firms interested in rubber. The subscription being £3-3, I think it is most desirable that we should keep in touch with such an influential Association and the matter will be taken up for discussion during the Meeting.

Benevolent Fund.—This fund is growing but not at the rate it should do. A full report will be laid before you during the Meeting.

There have not been many calls on the fund so far, but I wish to make a special appeal to all District Associations to subscribe their utmost this year.

You have only to look at the list of planters who have gone to the War, many of them married men with families, to realise the claims that may be made on the fund in the near future.

Already some have gone never to return, some may leave those dependent on them without the means of getting Home, and others may be incapacitated for work, and surely it is to us who have stayed behind that they will look for help.

I should like to see every planter who is drawing a salary of Rs. 300 a month, and is not already a life-member become one at once. It is not very much to ask as the subscription to become a life-member is only Rs. 200.

* We have all been subscribing to various War Funds, but I think our own fund has a special call on us at this time, and I hope it will meet with the support it deserves. Separate donations from any who wish to give more will also be gladly accepted.

Railways, Roads and Harbour on the West Coast.—There is much regret that the construction of the Arsikere-Mangalore Railway seems as far off as ever.

There is a proposal for a railway along the foot of the Nilgiri-Wynaad Hills from Shoranur to Mysore, a proposed outlet from the Anamalais to the head of the Cochin Tramway, the Cochin Harbour Scheme and the Vaigai Valley Railway, all of which will come up for discussion during this Meeting.

At our last Meeting we took farewell of the Hon'ble Col. Sir Hugh Daly, the British Resident in Mysore and Chief Commissioner of Coorg, but like many others he has had to stay at his post owing to the

War, and I am sure we are all glad to welcome him here in our midst or another year. I can only repeat what our Chairman said last year, that when the time comes for their retirement we wish himself, and Lady Daly many years of happiness in the old country.

I cannot close without thanking the members of our Council, members of our various Committees, Mr. Anstead, and our Secretary for the help they have given me during my term as Chairman, and I am specially indebted to our Planting Member, the Hon'ble Mr. Barber, who has spared neither time nor trouble in the interests of the Association.

Our thanks are also due to the *Madras Mail* which has always taken a great interest in our industry and its affairs, and whose weekly planting letter is always full of interest.

The accounts are on the table, and I trust will be found in order. There are one or two items of expenditure connected with the Scientific Department which has caused an excess over the estimate, but these are not recurring, and apart from them the expenditure is within the estimated figure.

On the income side of the balance sheet there is a falling off in the profits of the *Chronicle* which was only to be expected, as owing to the War many advertisements were withdrawn which are our chief source of income as regards the *Chronicle*.

The year we have just closed has been a terrible one, and we still have much to face. It is a time when absolute co-operation is called for in every stage of life, and I hope when this Meeting closes we will leave this hall as our name implies "United."

The Resident's Speech.

The Hon'ble Sir HUGH DALY said :—

GENTLEMEN,—I wish first of all to thank you very warmly for the way in which you have received your Chairman's kindly remarks about Lady Daly and myself. With the Chairman's permission, I wish to make a brief statement as to railway matters. In January last, the country between Mysore City and the neighbourhood of Fraserpet, in Coorg, was examined by the Durbar's Engineer-in-Chief, Mr. Bell, who drew up a Note with rough preliminary estimates, for certain alternative routes. After due consideration of Mr. Bell's views, the Durbar informed me that, provided the Government of India and the Coorg Administration would co-operate, they were prepared to undertake the construction of a branch line, which would take off from a station on the Mysore-Arsikere Line, now under construction, and would give connection with Coorg. The precise point at which the branch should take off from the Mysore-Arsikere Line, is still under examination and I need only say here that the Durbar are anxious to give the fullest weight to any views on this subject which may be expressed on behalf of Coorg. The Durbar have given orders for a regular survey to be undertaken as soon as the rains are over, and Mr. Dove-Wilson, who recently succeeded Mr. Bell as Engineer-in-Chief, has already paid a visit to Fraserpet. The survey will probably be commenced in October, and we may hope that it will be completed in the beginning of next year. The Durbar are also taking steps for the investigation of traffic prospects, and will welcome any assistance in this matter that can be given in Coorg.

Speaking generally, it may be assumed that one-third of the cost of the scheme, as at present outlined, should be borne by or contributed from Coorg, while the Durbar would arrange to meet the other two-thirds. I have been in unofficial communication on the subject with the Hon'ble Mr. Gillan, President of the Railway Board, who is taking much interest in the project, and is very ready to assist with advice. The question of financing the Coorg section can hardly be effectively tackled until we know the results of the survey and have obtained up-to-date estimates of the probable traffic. So far as I can judge, however, there is no reason to anticipate any serious difficulty in the matter.

The Madras Government, as some of you are aware, are considering certain railway projects in connection with the Cochin Harbour Scheme. The interests of the Durbar in these projects appear to be comparatively unimportant; but the Durbar will gladly consider the possibility of co-operating. The Hon'ble Mr. Barber is, I believe, to discuss these matters with the Dewan. The Durbar are anxious to consider, and, if possible, to assist in any projects for the development of the public interests in or on the borders of the State. They recognise the value of a frank and informal exchange of views in the preliminary stages of such questions, and if there are such subjects on which members of the Association would wish to consult the Durbar I have no doubt that suitable arrangements for discussing them can easily be made.

That ends what I have to say on the subject of railways. I would now just like to say that all of us feel the greatest admiration for the way in which the Planters of Southern India have taken their share in the trial through which the Empire is passing. I may be forgiven if I feel specially proud of what has been done by the planters of Mysore and Coorg. I heard a short time ago from Mr. J. A. Graham, who had just joined his Battalion, the 7th Lincolns. On joining he found that no less than four members of the Coorg and Mysore Rifles already held Commissions. This is very encouraging, because it shows how even the details of organisation are thoroughly attended to. I have not heard from Mr. Graham lately, but when I last heard he was expecting very shortly to go to the front and I see from the reports since received that the Battalion is now in the fighting line. I have no doubt that our men will give a good account of themselves.

LABOUR DEPARTMENT.

REPORT OF THE DIRECTOR.

GENTLEMEN, I submit my report for the first year's working of the Labour Department.

<i>Income.</i> —The subscribing area was	...	...	98,118½ acres.
<i>Subscriptions</i> at Rs. 2 per acre	...	Rs.	1,96,236 4 0
of this the amount collected was	...	"	1,73,755 4 6
leaving a balance due by subscribers of	...	"	22,480 15 6
On 30th June 1915, since which all but Rs. 3,326 have been collected.			
Interest received from the Bank was	...	"	502 7 6
<i>The Estimate.</i> —Sanctioned for the year by the			
Control Committee was	...	"	1,65,530 0 0
<i>Expenditure.</i> —The sum actually spent including	...	"	156 3 0
for depreciation amounted to	...	"	1,22,957 7 11
which is less than the estimate by	...	"	42,572 8 1
This was due to savings in the Srivilliputtur Division of			
...	...	"	5,000 0 0
This was, due to savings in the Nagercoil Division of			
...	...	"	800 0 0

The balance was unspent because of the difficulty experienced in getting suitable full-time European officers for South Canara and the Telugu divisions until quite at the end of the year and in selecting Indian Agents for work in all the divisions except Srivilliputtur and Nagercoil, which were taken over fully organised.

Accounts.—The Audited Accounts in your hands show the position on 30th June, 1915.

Work done.—The number of instances in which the assistance of the department was invoked by subscribers was 1,804.

The total number finally disposed of was 630.

The number of such cases which for various reasons and after everything possible was tried, had to be dropped with the consent of the subscribers concerned was 24.

Pendency.—The balance of cases pending, that is, about which correspondence, enquiry and action is still in progress numbers 1,150.

Recoveries.—The amount of cash which the department recovered from defaulters and remitted to subscribers was Rs. 15,488 6 6

The amount which was found to be irrecoverable by any known means was 6,199 5 4

And the amount still due by the same defaulters is „ 968 0 0

Total involved in these cases Rs. 22,655 11 10

The percentage of recovery to demand in these cases is therefore about 68½.

The balance of cases pending, as above, have still to be dealt with. This result was obtained simply by palaver in most instances. No Vakils fees were paid and the Courts of law were not resorted to except in very few cases.

I assert with confidence, that had it been the other way about, the result would not have been nearly so satisfactory, and the money recovered through the law courts would probably have been swallowed up in the way so well-known to those who have experience of litigation. The skill which has to be exercised by our Staff, to get anyone of the class of people with whom we have to deal, to pay their debts or any part of them, can be imagined only by those who realize that most of them have no property; when the art is closely akin to that of coaxing the breeches off a Highlander, or if they own property it is mortgaged up to the hilt, which to me as an Irishman is a certain guarantee of indisputable good birth and gentility, and equally with the proud possession of an ancestral debt in this country, carries with it the inability to pay.

Defaulters.—412 defaulters were induced to return to the Estates of subscribers to work off their indebtedness amounting to Rs. 32,392-10-10. Of these 260 actually arrived on the Estates, and represented a sum of Rs. 24,098-8-5. The percentage persuaded to keep their word was therefore about 63 per cent. Of those that did not fulfil their promise, the great majority have not been lost sight of, only a few made themselves scarce, but watch is kept for them. It would be interesting

to know the amount of money worked off by such as reached the Estates; but I have not the power nor the desire to add to the office work of subscribers by asking them to send in such returns. The amount per head comes to Rs. 80, and it is unlikely that more than a tenth part of this was worked off. When they leave the Estate again with or without permission, subscribers again put the Department on to them, and they have to be dealt with *de novo*.

The Main object has been gained: we have shown to all the world that defaulters have no easy time, and never fail to contrast their state, with that of people, happily more numerous, who find that in spite of their inclinations, comparative honesty is after all the best policy, and leads to a life of affluence which to the practical is at any rate free from the worry of the Labour Department, and to the imaginative, free from all care. I have mentioned this as the main object, for all else is subordinate to it, and it is not a true way of looking at things, to judge the work of the Labour Department by statistics alone.

Internal Competition.—The number of cases which the department assisted to regulate was 49.

Unfair Competition was dealt with in 50 instances.

External Competition.—Neither the conditions in Malaya, nor the riots in Ceylon had any direct effect on the recruiting operations for S. Indian Estates, there may have been some indirect benefit, but it was not appreciable. Our advanced labour has not been enticed out of the country. Maistries and other defaulters owing money to our subscribers sometimes emigrate with a view to escaping and avoiding the trouble given to them by the Labour Department. The Ceylon Labour Commissioner has proved his willingness to help us, and we will abide by our promise to reciprocate. A similar amicable arrangement can no doubt be come to with the authorities in charge of recruiting operations for Malaya.

Information about kanganies and maistries was supplied to the number of 515.

Laggards.—1,241 were hurried up.

Assistance was applied for by 1,005 maistries and kanganies who were helped in all their difficulties.

Advice was given to those Estates which applied for it about where and when to get coolies.

Warrants.—Thirty civil and 92 criminal warrants were served through the department.

One of the chief difficulties can be overcome by subscribers themselves who must give the correct names and addresses of their defaulting maistries, and see that maistries do the same of their coolies. Otherwise no department, and no Government can help them. The proper use of the department by subscribers will get over this difficulty. Subscribers should provide themselves with the alphabetical list of villages in the Taluks and Districts of the Madras Presidency, 1914 Edition, price 9 annas, obtainable by V. P. P. from the Superintendent, Government Press, Madras. Hamlets are not given, but when maistries and coolies give any name not in this list, they should be

asked the name of the mother village or Gramam. The list of villages of the Mysore State price Rs. 4 is published at the Government Press Bangalore: it gives a lot of other information being Part V of the Mysore Census of 1911 and is a village population table.

New Connections.—1,043 villages were searched for new connections. The work was commenced late, when the weather was favourable for local cultivation, so no immediate result could be expected, but a foundation has been laid on which future operations will be built up.

Advertising.—Special and general was done in particular villages and over various tracts of country. One Cinema film to advertise Tea Estates was prepared; but it will not be used until the Rubber and Coffee Estate films are ready to show simultaneously. Embossed and coloured tin plates have been ordered; and will be ready before next recruiting season.

Estates.—Four were visited at the request of Proprietors and Managers with a view to helping on labour matters.

Professional Recruiters.—Measures were taken to discredit the operations of twelve professional recruiters.

Restriction of Advances.—Twenty-seven particular instances cropped up and were dealt with, but the general question which is a vital object of the department, was only dealt with earnestly in the Kanan Devan District. Complete success could not be expected in one year but the amount of success attained is distinctly encouraging and impels me to impress on all employers of labour, whether they are subscribing to the department or not, the possibility and necessity for co-operation in this matter.

It is well known that the advance system is at the bottom of most if not all of our labour troubles. Most districts are now considering the adoption of certain rules and regulations to deal with local labour difficulties, and as a supplement to these, the amount of advance to be given per head for coolies should be fixed and agreed to by everybody in each district, whether they belong to Planters' Associations or not.

To all Proprietors of Estates I say you are risking money needlessly in advances if you do not take the opportunity to combine in fixing a rate.

To the Directors and Shareholders in British and elsewhere of Companies owning Estates in South India, I say, your Interests are not being properly looked after if advances are higher than they need be, and they need be no higher than the rate fixed and agreed upon by planters in those districts where your Estates are situated.

To Superintendents and Managers in charge of Estates belonging to others, I say, you are not looking after the interests of your employers if you do not agree and do not abide by the limit for advances fixed in your particular district.

The man who claims to 'gang his ain gait' in this matter proclaims his ignorance of present conditions, and his inability or worse still, his unwillingness, to look to the future.

To the subscribers of the Labour Department particularly I say, with all the emphasis at my command, you are not getting anything like full value for your money if you do not combine in this matter, and loyally keep to the limit of advances which may be agreed upon in your district.

Undoubtedly all sorts of anomalous positions will become apparent. All of us are aware of some of them now, but a beginning must be made some time. The opportunity to begin presents itself, and advantage of it should be taken now. Although in the foregoing paragraphs I have insisted on the necessity for combination, I am at a loss to see how this unity can be made really effective unless it be done through some central organization. Such an organization capable of dealing successfully with this important subject is ready to hand in the Labour Department of the U. P. A. S. I.

Registration.—A list of questions was circulated last year, in which No. 14 was asked with a view to obtaining particulars for a Directory of Labour Suppliers, Maistries and Kanganies, so as to lessen the chance of two or more Estates advancing the same man, which is one of the difficulties with which we have to contend. Owing to the number of people with *aliases*; some means of identification is necessary, the impression of thumb marks seems to be the simplest for our purpose. A man to classify and read thumb marks has been trained at the department's expense, and has now taken charge of his work. The Directory is consequently being taken in hand with a view to a future Registration Scheme, if found to be desirable.

Payments were made at the request of subscribers on their behalf to 49 maistries, a practice which the Labour Department does not encourage on principle, as it is considered inadvisable in money matters to introduce a third party between master and servant.

Warnings.—Sixteen circulars containing the names of 139 men who should not be advanced by subscribers have been issued, and it is known that owing to these warnings, money has been saved which otherwise would have been lost to a certainty. Although the lists are confidential, the information has of course leaked out, and the men knowing they are watched for, seek their prey elsewhere than on subscribing Estates.

I remain, Gentlemen,
Your most obedient servant,

AYLMER F. MARTIN,
Director of the Labour Department,
U. P. A. S. I. Incorporated.

BANGALORE
13th August, 1915.

ANNUAL REPORT OF THE PLANTING EXPERT.

GENTLEMEN,—I have the honour to present to you my Sixth Annual Report as Planting Expert and Scientific Officer to the U. P. A. S. I. This Report takes the usual form, being a summary of the work done by the Scientific Department during the year under review ; detailed discussions of pests, diseases, manures, etc., are left to be dealt with under their separate headings on the Agenda Paper at this Annual Meeting.

OFFICE AND CORRESPONDENCE.

My office staff throughout the year consisted of one writer and one peon, and the upkeep of this staff was met, as in former years, by a contribution from the Government of Madras.

During the first half of the year under review I was absent on leave in England.

I had the honour to attend, as your representative, the Third International Congress of Tropical Agriculture held at the Imperial Institute, London, from 22nd to 30th June, 1914. At that Congress I read a paper on "Ceara Rubber, Cultivation and Manufacture in South India" which was well received and which elicited an interesting discussion.

I also attended the Fourth International Rubber Exhibition and First International Cotton, Fibre and other Tropical Agricultural Products Exhibition held at the Agricultural Hall, Islington, and opened on 24th June, 1914. South India was not represented at these Exhibitions which I venture to think was a pity, for though I am not prepared to maintain that taking part in such Exhibitions brings any material gain to the planter, at the same time I do not think that Southern India can afford to remain unrepresented at such Exhibitions in which all other countries are taking part.

The Gold Medal offered by "Tropical Life" for the best sample of 50 lbs. of Ceara Rubber shown by a grower was won very easily by Mr. W. Egerton, Manager of Messrs. Matheson's Central Rubber Factory in Coorg, no other competing samples being able to at all compare with it in excellence.

I returned to India and resumed my duties at Bangalore on 1st October, 1914. Since my return office work as usual has been heavy, and correspondence with planters has absorbed much of my time. From 1st October, 1914, to 30th June, 1915, 620 letters have been received and 595 written. These figures correspond almost exactly for the nine-month period reported last year, showing that this part of the work of my department is a constant factor.

A record has been kept of the numbers of planters and others who, during the period under review, have called at my office to see me on agricultural business. This record amounts to 80.

PUBLICATIONS.

I have as usual contributed regularly to the pages of the *Planters' Chronicle*, and have written, during the period under review 80 notes, articles, etc., constituting 78 pages of that Journal.

At an Extraordinary General Meeting of the U. P. A. S. I. held in March, 1914, a Resolution was passed asking the Mysore Durbar to increase their contribution towards our Scientific Department. This the Durbar kindly consented to do, and at the same time they expressed the hope that I would co-operate with the Agricultural Department of the Mysore State in making my experience available to Indian planters in Mysore. Commenting upon this I wrote to the Secretary of the U. P. A. S. I. from London in June, 1914, and said, "I can assure the Durbar that it is, and always has been, my sincere wish and earnest endeavour to co-operate with the Agricultural Department of Mysore in all work connected with my department, and I shall most heartily welcome any suggestions from the Mysore Agricultural Department as to how this co-operation can be made more close and effective for the mutual advantage of both Departments." By way of giving practical effect to this expression, at the suggestion of Dr. Coleman, the Director of Agriculture for Mysore State, I prepared an account in simple language of the Cultivation and Manuring of Coffee which has been published by the Mysore Agricultural Department in the form of a Bulletin.

At the request of the Director of Agriculture, Madras, I also wrote an article describing the Planting Industries in Southern India for the book being compiled by Mr. Somerset Playne for the Foreign and Colonial Compiling and Publishing Company dealing with Southern India.

Finally with the help of the Hon'ble Mr. E. F. Barber, I wrote an account of the Scientific Department of the U. P. A. S. I. describing its past history and its proposed future development. This has been issued by the U. P. A. in pamphlet form. These constitute the chief publications issued during the year.

TOURS.

During the period under review I have been chiefly occupied at Bangalore, but have been absent from head-quarters on duty for 23 days.

In October, 1914, I proceeded to Madras to consult the Director of Agriculture about the general work of my department, and on my way back paid a visit of inspection to Messrs. Parry and Co.'s manure works at Ranipet.

In December, 1914, I attended an Agricultural and Trade Conference in Madras for which I prepared a short note on the Fertilisers used in Planting districts.

In January, 1915, I attended the Second Meeting of the Indian Science Congress held at the Presidency College in Madras.

In February, 1915, I paid a short visit of inspection to the Kalasa District of North Mysore, primarily to see the first Okrassa Coffee Dryer at work on Mavinkere Estate. This innovation in Coffee curing on the Estate gives promise of being a great success, and it is hoped to conduct some more detailed trials with it on the 1915-16 crop. The trials made this year were under conditions which do not warrant the publication of the results obtained, but it may be stated that taking into consideration all the adverse circumstances of this year's trial the results were highly satisfactory and very promising for the future.

In March, 1915, I attended a Meeting of the U. P. A. S. I. Scientific Department Committee held in Madras.

These expeditions have necessitated my travelling a distance of 2,012 miles by rail and 168 miles by road.

In June I obtained the Motor Car so kindly provided for me out of U. P. A. S. I. funds, and this will greatly facilitate touring in the future.

SCIENTIFIC ASSISTANTS.

Mr. G. N. Frattini, the Scientific Assistant for Mysore, has carried out his duties throughout the year in a satisfactory way. His headquarters and laboratory are now established at Ootsey, Mudigere. He has completed the partial analysis of a number of Mysore soils, and a pamphlet dealing with these analyses was published and distributed to subscribing members of the Mysore Associations as Circular No. 17.

Green Bug, Black Rot, and other diseases of Coffee and general manurial problems have been studied.

The control of Mr. Frattini's work and the relation of the Council of the Mysore Planters' Associations to the individual Associations on the one hand, and myself and the U. P. A. on the other, would appear to call for careful revision. The existing state of affairs is most unsatisfactory and tends to inefficiency.

EXPERIMENTAL WORK.

The Kalisyndicate Manurial Experiment Plots laid down in Coorg and Mysore have been affected by the War, the Kalisyndicate being a German concern. The experiments in Coorg have come to an end. Enough money was in hand, however, to carry those being conducted in Mysore over this present year, and they are being continued. After this season's crop it is hoped to collect, tabulate, and publish the results obtained.

The experiments being conducted on Baithney Estate have been continued and these experiments will soon yield some valuable and interesting results.

On several estates a systematic method of manuring based on a period of three to five years has been adopted on my advice and these are yielding highly satisfactory results, some of which have already been published in the *Planters' Chronicle*.

Some manurial experiments with Hevea Rubber on Kerala Estate have been carried through their first year and are being continued.

A final report on the Bees and Coffee Pollination work was published in August, 1914, as G. O. No. 2268 and a report on the recommendations made therein in December, 1914, as G.O. No. 3588. The conclusion come to is that *Apis dorsata* does play a useful part in the pollination of coffee and should be protected but such protection is difficult to arrange. It is thought, however, that something could be done if Estate Managers would communicate the boundaries of the adjoining Government lands which require protection, and would then assist the Forest Department to put a stop to all interference with the combs of this

species of Bee. The Boundaries of the areas which require protection could be notified in the sale notices of the department and the Forest Officers, aided by the Estate staff, should then be able to prevent the destruction of the Bees. This is the eminently practical suggestion made by Mr. C. D. McCarthy and it has been approved for adoption by the Government.

A number of experiments to determine the effect of spraying with Bordeaux Mixture on Black Rot Disease of Coffee were conducted by Mr. Frattini and showed that this method of control is possibly a practical one. The experiments are being continued during this monsoon on a more elaborate plan. Both in this work, and in the study of Green Bug, my department are endeavouring to the best of their ability with their limited Staff, to co-operate with Dr Coleman who has taken up a systematic study of these two important diseases of Coffee.

LABORATORY.

As in past years there has been little time available for laboratory work. A few small investigations have been undertaken however, one of which will form part of a lecture to be delivered at this Meeting. Forty-two analyses of fertilisers, etc., have been made during the period under review.

When the laboratory was established in 1910, it was agreed that it was to be looked on as a necessary aid to the Scientific Officer's work, and that analyses would not be undertaken for planters as a matter of right. The practice which has been adopted is to refuse to undertake the analyses of soils at all, but to analyse fertilisers as opportunity permitted. The amount of routine analytical work which can be undertaken is necessarily very small, as the Scientific Officer's time is mostly taken up with other matters, and what time can be spared for laboratory work is devoted to research.

This is undoubtedly a most unsatisfactory position, since one of the main duties of a Scientific Department should be to afford facilities for the performance of analyses of soils and fertilisers, and there has been a growing discontent with the existing arrangements.

The Executive Council of the U. P. A. S. I. decided in March last to make an attempt to remedy this defect by appointing a Native Assistant Chemist to work under my supervision in the laboratory at Bangalore, and in future the Scientific Department hope to undertake analyses of soils, fertilisers, etc., a fee being charged for analysis.

This seems to be a fair way out of the difficulty and the fees have been arranged so that they may just pay expenditure on this new project. They are very small when compared with the fees charged by outside analytical chemists.

This new feature of the Scientific Department is only an experiment and it is hoped that it will receive the support of planters generally, since on the amount of this support its success must depend. Up to a point, limited by the actual number of analyses a man can make, the more work sent in the more likely the scheme is to pay for itself. If use is not made of the facilities now offered it is obvious that it cannot pay and it will probably have to be discontinued.

Some difficulty has been experienced in finding a suitable man to fill the post of Assistant Chemist and it is not easy apparently in this country to find a man with sufficient training in the rudiments of analytical chemistry who is willing to accept a small salary as a beginner and build up a connection and reputation for himself. It is, however, hoped to overcome this difficulty before long in a satisfactory way and in the meanwhile I am carrying on the scheme to the best of my ability in time not devoted to my other duties.

THE SCIENTIFIC DEPARTMENT.

At an Extraordinary General Meeting of the U. P. A. S. I. held in Bangalore, on 11th and 12th March, 1914, the future development of the Scientific Department was discussed and it was then suggested that the Madras Government should be asked to take it over and run it as a separate Government Department. This idea was developed at the Annual Meeting in 1914 and resulted in a definite offer on the part of the Government. On my return from leave the matter was taken up and a Committee consisting of Messrs. J. A. Richardson, Hon'ble E. F. Barber, C. H. Browne, and C. E. Abbott were appointed to go thoroughly into the matter. This Committee met in Madras in March, 1915 the Director of Agriculture and myself being present, and the scheme laid before the Annual Meeting last year was elaborated and considerably expanded. This scheme will come before you for consideration at this Meeting, and I only desire now to commend it to your earnest attention. I trust that a great effort will be made to meet the Government who have made a most generous offer to the U. P. A. I consider that if the Department can be established on the lines suggested it will at last give scope for real work and research and be worthy of this United Association. The difficulties in the way of conducting experiments on scientific lines which under present circumstances are insurmountable will be all done away with, and research will be undertaken on our own special experiment stations. The appointment of a Mycologist to study the fungoid diseases which yearly takes a heavy toll of our crops is a need I have frequently called attention to. In a word, you will have a properly equipped department organised along proper lines instead of the present haphazard "one man show."

It is the re-organisation that I pleaded for in my Annual Report for 1913, and I trust you will be able to see your way to accepting it.

RUDOLPH D. ANSTEAD,

Planting Expert.

PLANTING MEMBER'S SPEECH.

MR. CHAIRMAN AND GENTLEMEN,—I do not consider this item on the programme a fair one, for any matter in regard to which I have been able to do any work, is on the Agenda Paper and will come up for discussion in due course.

I would say first that I am sorry I was at Home last August and not able to help at a time when everybody was anxious, and the future looked dark. Our Chairman took the extra work on his shoulders as

it came and we are all of us deeply indebted to him for the services he has rendered and for the able way in which he has carried them out.

The Chairman's address and the reports of the Secretary, of the Scientific Officer and of the Director of the Labour Department, cover very fully the activities of our Association during this momentous year. There are, however, two points on which Mr. Richardson has asked me to say something.

The Labour Department, although it was started on the 1st of July last year, did not begin to organize itself till Mr. Martin's return from leave and did not therefore have the best chance of justifying its existence. But it has justified its existence, and with some knowledge of the inner working of the department and with the full knowledge of the zeal that inspires that work, still I am amazed at the results that have been achieved, and at the amount of spade work that yet remains to be done.

I think I am right in saying that at our last Meeting the Labour Department was born under the best auspices. The majority of delegates were in favour of the scheme and those who could not support it adopted an attitude of tacit benevolence.

There had been a good deal of criticism prior to the Meeting. That was to be expected, for it is humanly impossible to devise a scheme that can appeal equally to all. Besides this criticism, there was a certain amount of underhand work done with a view to prevent the scheme going through. I thought we had done with this, once the matter had become accomplished, and on my return from Home I was surprised to find that this was not the case. I am not deeply concerned about the matter, for this mud throwing is not likely to hurt the department or anyone connected with the department. The matter at an ordinary time would not be worth mentioning, but now at this time I do think that it is distressing, and I do think an appeal should be made through you, gentlemen, that any plan of blackguarding an individual or an institution because of hostility to the department should be put a stop to, at any rate until the War is over. I am not asking that fair criticism be stopped, no one can object to that, I am only asking that malevolence and false insinuation be given the treatment they deserve.

The other point which the Chairman has asked me to refer to is the proposed re-organization of the Scientific Department. The proposal has been before us for some time. It was initiated at the special Meeting in February of last year and the wishes of members crystallized at the Meeting in July. A Committee was appointed for the double work of formulating a scheme that would be acceptable to the Members of this Association and also acceptable to the Government.

The scheme is before you and what measure of success the labours of the Committee have obtained you will be able to judge. However, I wish to say that the work that has been done by your Committee could not have been done without the kind co-operation of Mr. Chadwick. He has spared himself no trouble in regard to detail, and I think I am right in saying that it was due to his efforts that the scheme now put forward appealed at once to the Hon'ble Mr. Cardew.

The Committee certainly have achieved half what they set out to do, and I, for one, am looking forward with interest to see what reception the proposals will meet with at this Meeting.

Co-operation has been one of our needs from the beginning and co-operation is the basis of our existence as an Association. It seems to me that now more than at any other time in our history, it is necessary for us, with common aims and working in one calling to hang together. The necessity is there in supporting the Scientific Scheme and Mr. Martin has shown how necessary it is in regard to Labour. I endorse what he has said and appeal to you, Gentlemen, to agree to try and sink what little differences we have.

The Secretary said in his report regarding weights and measures that nothing had yet been done, but that was before he had seen the report of the Weights and Measures Committee which appeared in the "*Madras Mail*" on Saturday the 14th instant. Our views were put very clearly before the Committee by Mr. Martin a few years ago. I am sorry that our view has not been accepted. It seems however that a scheme of uniform weights and measures has been advocated by the Committee.

Mr. MURPHY (Mundakayam).—Might I make a remark on the Hon'ble Mr. Barber's speech on the Labour question.

The Chairman.—That report will come up for discussion later on.

Mr. MURPHY.—I should like to make my remarks now if it is allowable.

The CHAIRMAN.—I really do not think that we can have any discussion this afternoon. You will have an opportunity for what you have to say at the proper time.

That closes the business of the afternoon. We will resume to-morrow morning at 10 o'clock.

The Meeting then adjourned.

Tuesday, 17th August.

The delegates met at 10 A. M. at the Mayo Hall.

Finance.

The CHAIRMAN opened the Proceedings with the following statement :—

We start this morning with the subject of Finance, which is rather earlier than usual for this subject. The reason for this is that before discussing the proposed re-organisation of the Scientific Department we want to be quite sure that our finances can stand the strain. Before passing on to next year's Budget, however, I shall be glad if some member will move the adoption of last year's accounts, unless there are any questions you would first like answered.

Mr. W. A. LEE (Kanan Devan) proposed and Mr. J. Nicolls (Nilgiris) seconded :—"That the accounts for last year be passed." This was carried.

The CHAIRMAN.—We now come to the Budget for next year in which we have included Rs. 10,000 required for the proposed new Scientific Department. There has been some doubt expressed as to whether our funds were in a position to meet this, but I think I can prove it to you that the money is there, provided we have no withdrawals from the Association, and, I think we are quite justified in recommending the adoption of the scheme, even if it does strain our funds to the utmost. It must, of course, be remembered that even if we ear-mark this Rs. 10,000 for the Scientific Department in this year's Budget, it is not at all likely that the scheme will actually take form during the present financial year. For the information of those who are rather sceptical regarding our ability to meet this expenditure, I would just like to point out how we hope to meet it.

If you take the total expenditure on the Scientific Department from last year's accounts, you will find it amounts to Rs. 8,688-5-5; from this is to be deducted the sum allowed us by the Madras Government, Rs. 1,000, showing a total expended from our own funds of Rs. 7,688-5-5. If the whole Department is taken over by the Government, we will make the following savings :—Amount as above, Rs. 7,688-5-5; Scientific Department clerk, Rs. 600; rent Rs. 600; peon, Rs. 132; lighting, Rs. 100; total Rs. 1,432; balance at profit and loss account of the U. P. A. S. I. Rs. 789-6-9 showing a total of Rs. 9,909-12-2. To this can be added the subscriptions promised last year for a period of five years, amounting to Rs. 1,800. This brings the total up to Rs. 11,709-12-2. To guard against any unforeseen falling off in subscriptions, a Guarantee Fund has been started, asking planters to guarantee a small amount of Rs. 150 each in any one year, which is not to be called on unless the working profit of the U. P. A. S. I. falls below Rs. 500. The amount already guaranteed comes to Rs. 2,300, and I have no doubt many more of our members will be quite prepared to add their names to this list. I will now ask the Secretary to read you his Budget and estimated expenditure for next year, and if there are any further explanations I have no doubt he will be in a position to give them.

The Secretary then read the estimated receipts and expenditure for the year, which was as under :—

Estimated Income, 1915-16.

Subscription—			RS.	A.	RS.	A.
Anamalai P. A. ...	...	...	1,350	8		
Bababudin P. A. ...	...	...	711	14		
Central Travancore P. A. ...	...	...	856	0		
Coorg P. A. ...	...	...	1,625	0		
Kanan Devan P. A. ...	...	...	2,785	10		
Mundakayam P. A. ...	...	...	1,585	2		
Nilgiri P. A. ...	...	...	1,501	12		
North Mysore P. A. ...	...	...	1,250	0		
Shevaroy P. A. ...	...	...	614	6		
South Mysore P. A. ...	...	...	812	8		
South Travancore P. A. ...	...	...	1,875	0		
West Coast P. A. ...	...	...	1,818	2		
Wynaad P. A. ...	...	...	1,333	8		
					18,119	6
Government of Madras ...	...	...			1,000	0
Planters' Chronicle ...	...	...			1,000	0
Ex-Chairmen's subscription ...	...	...			75	0
Interest ...	...	...			370	0
Contribution from the Labour Department ...	...	...			2,400	0
					22,964	6

Estimated Expenditure, 1915-16.

				RS.	A.
Secretary's Salary ...	...	...	...	6,000	0
Office Salary ...	...	...	...	2,358	0
Rent ...	...	...	...	1,800	0
Postages ...	...	...	...	350	0
Telegrams ...	...	...	...	75	0
Laboratory Lighting ...	...	...	...	100	0
Lighting and Water ...	...	...	...	80	0
Office Charges and Petties ...	...	...	...	200	0
Stationery ...	...	...	...	375	0
Printing Charges ...	...	...	...	200	0
Scientific Officer's Contingencies ...	...	...	...	200	0
Laboratory Upkeep ...	...	...	...	400	0
Contribution to Madras Government ...	...	...	...	4,036	0
Reporter's Fee ...	...	...	...	250	0
Reporter's Expenses to attend the Meeting ...	...	...	...	104	0
Chairman's Travelling Allowance ...	...	...	...	150	0
Planting Members' Travelling Allowance ...	...	...	...	150	0
Subscription to London Chamber of Commerce ...	...	...	...	160	0
Subscription to Rubber Growers' Association ...	...	...	...	47	4
Periodicals ...	...	...	...	200	0
Books of Proceedings ...	...	...	...	200	0
Audit Fee ...	...	...	...	150	0
Depreciation on Furniture ...	...	...	...	275	0
Fire Insurance ...	...	...	...	17	7
Library ...	...	...	...	200	0
Furniture ...	...	...	...	200	0
Committee Meetings ...	...	...	...	500	0
Contingencies ...	...	...	...	50	0
				18,827	11
Balance				4,186	11
Total				22,964	6

The Meeting then went into Committee while certain information was asked and given regarding certain items in the statement.

The Labour Department.

The following Resolution was moved by Mr. J. J. MURPHY (Mundakayam):—

“That an annual payment be made by the Labour Department to the General Fund of the U. P. A. S. I. on acreage subscribing to the department, but not subscribing to the U. P. A. S. I.”

He said:—An estate which does not belong to a District Association should certainly not be allowed to join departments of the U. P. A. S. I. I admit that this subject ought really to have been dealt with last year, and that it is now too late to insist that acreage subscribing to the Labour Department must join a District Association. It would not be playing the game to try and turn these latter out of the department now. Until I read in last year's Book of Proceedings that one delegate said that 6,000 non-Association acres had joined the department through him alone, I was under the impression that the acreage outside the Association likely to join the Labour Department was so small as not to be worth talking of. It now appears that 26,000 non-Association acres have joined. The promoters of the undertaking which Mr. Martin so ably manages, were naturally anxious to obtain as large an acreage as possible, but, as leaders of the U. P. A., they should also have considered its interests. This, I think, they failed to do. They had what most planters look on as a very tempting bait, with which they might have induced a large acreage to join the Association. This would have added very materially to our financial resources, and would also have very considerably promoted the unity our leaders claim to have so much at heart.

The Resolution before you was not framed in a spirit of hostility to the department. It asks you to recognise the principle I advocate, namely, that Estates which do not support our Association should as far as possible not be allowed to benefit by U. P. A. efforts. So far, proprietors and managers of outside Estates have been taught to look on the U. P. A. as a milch-cow, from which all sorts and conditions of wandering calves may drain at will what is alleged to be rich life sustaining food, while its welfare is carefully looked after by a body of noble-hearted philanthropists. My Resolution asks the Labour Department, which might never have come into existence had it not been for this outside acreage, to contribute to the U. P. A., from its ample resources a small sum, the loss of which it will not feel, but which will make considerable difference to the Association.

Mr. MORRELL (West Coast) seconded the Resolution.

Mr. C. DANVERS (N. Mysore) asked whether the Resolution required non-Association members and members that did not belong to the U. P. A. S. I., to pay an anna more per acre as their share.

Mr. AYLMER MARTIN (Labour Director).—No.

Mr. DANVERS said that it seemed to him that the Labour Department now paid towards the general funds of the U. P. A. S. I. During

the past year it had contributed 50 per cent. of certain charges. That amounted to more than the sum Mr. Murphy wanted in his Resolution.

Mr. MURPHY (Mundakayam).—That was on account of extra work. No contribution has been paid by the Labour Department as part of its revenue.

Mr. C. H. BROWNE (N. Mysore) pointed out that during the coming year a sum of Rs. 2,400 would be paid by the Labour Department to the U. P. A. S. I. As a matter of fact, if they looked into the Labour Department account for last year they would see that a sum of Rs. 1,300 had been paid to the U. P. A. S. I. The auditor in treating that item had, he thought, dealt with it wrongly. The sum of Rs. 2,400 provided in the Budget in this year was a contribution from the Labour Department, which paid an allowance to the Secretary for extra work and a contribution sufficient to cover a moiety of the rent, lighting and other sundry charges. He might point out incidentally that this Rs. 2,400 was more than one anna an acre which Mr. Murphy proposed to exact; it amounted to 1 anna 6 pies per acre on the acreage alluded to.

After some explanations had been made by Mr. Browne regarding contributions that had been paid in the past year by the Labour Department to the U. P. A. S. I. General Fund, which had been wrongly entered in the statement by the Auditor, Mr. Aylmer Martin, the Labour Director, made the following speech:—

MR. CHAIRMAN AND GENTLEMEN,—

As this proposal concerns a payment from the Labour Department, I ask permission to speak on the subject. I admit that what I have to say should more properly be said under the heading of Labour than under that of U. P. A. S. I. finance. But as there is now a change in the original decision to have it discussed under the Labour Department, I am deprived of the opportunity of speaking unless I am allowed to do so now. I, therefore, crave your indulgence if I go rather fully into the matter, with the object of bringing out my point.

There is a parallel between the present position and that of a previous period in the existence of this Association. When the Scientific Officer's Department was first proposed, some districts and individuals did not want it and were not prepared to subscribe to the cost. I was, as usual in those days in the minority, and against the proposal. I even went so far as to make a suggestion that each district should have its own Scientific Officer, which will remind you of a similar one made last year with reference to the Labour Department. The present position is that some districts and individuals do not want the Labour Department, and do not wish to subscribe to it. But here, it seems to me, the similarity ends, for while the opposition to the Scientific Department was carried on without animosity, the Labour Department, even after it became an established fact, has had to face active hostility. There is a story told of the time when parties in the United States were divided for and against the re-election of General Grant to the Presidency. His opponents adopted as a sort of war cry, which became well known, the words "Anything to beat Grant." A popular divine was one day preaching to a large concourse of people, and used all his eloquence to prove that the end of the world was then at hand. The announcement was immediately and eagerly welcomed, a voice from the congregation exclaiming:—"Anything to beat Grant!"

Now although the opponents of the Labour Department have not actually used any such expression, in fact, their public utterances have been carefully guarded, their attitude has made their object clear. One means after another, one argument after another has successively been tried, in order to find something, *anything*, to beat the Labour Department. A proper solicitude for the welfare of the U. P. A. S. I., abandoned when it suited them, led to the fear that it was financing the department, followed by an abortive attempt to make history with the demand that the Association should have nothing to do with it, totally ignoring the fact that the U. P. A. S. I. owes its existence to the necessity for dealing with the labour question, and that the majority had at last seen that the proper way to do this was by combination, co-operation and self-help. It was thought that by separating the infant Department from its parent it would languish and suffer in its first struggles for existence. But would it? It is a pretty lusty infant.

Consider the Department uncontrolled by the U. P. A. S. I., free to adopt any means it might choose, any method it might learn from others. Does not the fact of it being controlled by this Association safeguard the general interests of the planting community at large? Am I not here to render an account of my stewardship to the U. P. A. S. I., which includes the minority? Birth was given by the place where the rumours come from to the idea that the Reserve Fund was in jeopardy and in curious ignorance of the constitution by which this Association is incorporated, the liability of members of it caused uncalled for alarm. All this play of lightning was accompanied by the thunder of threats to resign from the parent body. Their share of the Reserve Fund, the very existence of the U. P. A. S. I., all, everything, might be sacrificed—anything to beat the Labour Department. I am glad that Mr. Murphy disclaims any hostility to the department. I take this opportunity for saying that I am not actuated by any animosity to Mr. Murphy.

The specific proposition before us to-day is the latest little featherless fledgling of the same ugly brood, and hatched in the same nest. The proposal would have carried great weight, as Mr. Murphy admits, and would have received full consideration, if it had been brought up at the proper time, before the Department was started, or at the time when sanction was sought for non-associated members to subscribe to the Department. It is too late to trot it out now, as a sort of after-thought, the after-math of the first self-sown crop of imaginary troubles, the after-birth of a monstrous but still-born labour to bring forth something, anything, to beat the Labour Department. After its plans for the future have been already made by the Department, in accordance with its resources, it ill-becomes one who is not a subscriber to the Department to claim any say in the disposal of its funds, for that is what it comes to. The apparent simplicity of the proposal and the arguments used in its support may have appealed to you; what I have said will have put things in a different and, I think, a truer light; but through it all remember the one principle involved—are non-subscribers to be allowed to divert from its original purpose one anna of the subscribers' money?

The ludicrousness of the position is made all the more apparent when I tell you that there is absolutely no necessity for it. The Labour Department is already contributing to the U. P. A. S. I. a sum larger than the amount which Mr. Murphy's proposal contemplates. I can only back my opinion with one vote, and that not because of my

position in the Department, but by virtue of my being a subscribing past Chairman of this Association; my vote naturally cannot be exercised in matters concerning my own Department. Each of you has numerous votes, all the votes of the District Associations which you represent. If Mr. Murphy does not now see fit to withdraw his proposal, I appeal to you, gentlemen, to use your votes against it.

Mr. J. S. NICOLLS (Nilgiris) said that he gathered from what Mr. Murphy had said that the latter thought that the U. P. A. S. I. in this matter was acting as if it had no precedent for what it had done. This was not the case. When one considered what had been done in the past by the Association, there was nothing whatever against it and he did not think that there was any need for Mr. Murphy to bring forward the Resolution. When the Scientific Officer Fund was originally started, there was a considerable number of subscribers who were not members of any Association. The department was formed on the personal guarantee of different estates for five years, and as far as he could see nobody made any objection then. It was raised now for the first time in connection with the Labour Department. He thought that he was justified in saying that there was a precedent for it in the past and that delegates would consider it in that light and not as if this was an unheard of innovation.

The Hon'ble Mr. BARBER (Planting Member) said that he thought that from the way in which Mr. Murphy had put his Resolution it was certain to meet with a certain amount of sympathy from those present who did not understand probably that the Rs. 2,400 which the Labour Department paid the Association was a contribution which was far and above that which the Resolution proposed it should pay. It relieved the General Funds of the U. P. A. S. I. of a certain amount of expenditure on such items as rent, lighting, stationery and one or two other things. It was a division of expenditure and therefore a saving to the General Fund. He thought that the Labour Department had done all it could do in voting Rs. 2,400 to the General Fund. He thought it would be contrary to the spirit in which non-subscribers to Associations were asked to support the department to ask them for any more money for the support of the General Fund of the U. P. A. S. I.

COMMITTEE.

Mr. MURPHY said that he did not understand that the contribution of the Labour Department, which Mr. Barber and others had mentioned, came under the head of income.

The CHAIRMAN.—They were referring to the Budget which has just been read out.

Mr. MURPHY said that when he put his Resolution to the Meeting he knew nothing about that.

Mr. BROWNE said that, as a matter of fact, it was referred to. If they would look at the Labour Department accounts they would see the expenditure by the Secretary of the U. P. A. S. I. of a sum of Rs. 1,300-9-4 underneath the U. P. A. S. I. Income and Expenditure Account. Personally he was of opinion that a mistake had been made in the accounts in the method of treating this item. It should have been shown in the U. P. A. S. I. Accounts under the head of income as received by the U. P. A. S. I. Instead of which the auditor had put it not as a

receipt but as expenditure. Of course, for the present year's Budget it was different, they had decided to put it down as a source of income. The amount was being paid for the extra work of the Secretary and for certain items of expenditure which were shown in the Budget.

Mr. MURPHY said that the expenditure for purposes of the Labour Department could hardly be called a contribution to the funds of the U. P. A. S. I., which would be available for the Scientific Officer's Scheme or for the general use of the Association.

The Hon'ble Mr. BARBER said that it certainly was the case that this sum of money was available for the general purposes of the Association. The amount paid by the Labour Department relieved the General Fund of a certain portion of expenditure. To that extent the General Fund benefited; the balance would be bigger than it would have been if the Labour Department was not in existence.

Mr. MURPHY said that was an argument which cut both ways. What he wanted to know was how much of this money was available for general purposes.

The Hon'ble Mr. BARBER said that they could not tell Mr. Murphy that.

Mr. BROWNE.—You could tell, but it would take some time to get it from the accounts. It is obvious, however, that if you have to pay a sum of Rs. 100, to which the Labour Department contributed Rs. 25, you are pocketing Rs. 25 which is available for another purpose. It is precisely the same with the other items to which the Labour Department contributes.

Mr. DANVERS said that the simple point shown in Committee was that the Labour Department and the U. P. A. S. I. both benefited by combination. The Labour Department got certain services cheaper than it otherwise would do, and the U. P. A. S. I. made certain savings in expenditure owing to contributions by the Labour Department. His point was this:—Mr. Murphy wanted to have certain funds subscribed by the members of the Labour Department more or less earmarked for expenditure by the U. P. A. S. I. This seemed to be opening up an infinite vista of trouble in the future. Next year they might demand that As. 2 per acre be taken from the Labour Department. Leaving that out, however, for the present, he thought that members of the Labour Department might easily come in future years to say: "Why should our money be used for the U. P. A. S. I.? We subscribed for labour purposes. We have no objection if you benefit incidentally, but we do most distinctly object to our money that has been subscribed for the purposes of the Labour Department being used for general purposes of the U. P. A. S. I. We want labour to pick our tea, we don't care about your Scientific Department." He thought that it was wrong in principle to take money from the Labour Department and use it for the U. P. A. S. I.

Mr. P. G. TIPPING (Coorg) agreed with Mr. Danvers. They ought to take a broad and not a narrow view of things. The Labour Department as well as the U. P. A. S. I. were for the general benefit of the planters of the country. In this case it was simply taking money out of one pocket and putting it into another. Many only subscribed to one scheme, why should they not subscribe to both. In his district

many subscribed to the Labour Department who had no use for it. He thought they ought to view the matter on the broad lines that it was for the benefit of planters generally and thus secure the unity that the Chairman asked for (*Hear, hear!*).

Mr. MURPHY (Mundakayam) said that before sending in his Resolution, he knew it was entirely dependent on the members of the Labour Department whether it passed or not. There was no question of the Association trying to force the Department into paying the contribution. The majority of the votes was controlled by the Labour Department, so an Association, which did not belong to the Department, could not force its views on the Department. Mr. Martin's speech was really a defence of the Department which had never been attacked by him. At a recent Meeting of his Association a certain Resolution was brought up, not out of hostility to the Department, but merely for an expression of opinion as regards the financial position of the Department. The Chairman, who was present, was able to give a satisfactory explanation, and the Resolution was withdrawn. He did not think that Mr. Martin's remarks about his Association were fair therefore. Mr. Martin also said that non-subscribers to the Association could not be asked to pay one anna more in subscriptions to the Department. He (the speaker) did not ask that they should pay this sum. In fact, he said, that it would be unfair to ask those who had joined under an agreement to pay Rs. 2 per acre to pay any more. He had asked the Meeting, however, to say whether in all fairness it would not be right to ask the Department to pay a proportion of the money derived from non-subscribers to the Association from its surplus funds. It would make little difference to the Department. Mr. Browne had, however, put the matter in a different light. From what Mr. Browne had said, he understood that the Department did pay a sum to the Association. If he had been told this previously, he would not have brought his Resolution before the Meeting, and he would now ask permission to withdraw it. At the same time he would like to protest against the remarks made by Mr. Martin against his Association and he would also like to protest against the remarks made by Mr. Barber yesterday.

Mr. BROWNE asked if Mr. Murphy was correct in saying that Mr. Martin and Mr. Barber had made attacks on the Mundakayam Association.

Mr. MURPHY.—Mr. Martin certainly did.

Mr. BROWNE said that he did not remember hearing any Association's name mentioned. He might, with just as much reason, infer that his Association was referred to. In the early stages of the formation of the Labour Department he was a great opponent of the scheme, though he had since modified his views. He would under these circumstances, have just as much reason for assuming that an attack had been made on him and his Association. He did not think Mr. Murphy was justified in saying an attack had been made on his Association.

Mr. MURPHY said he certainly inferred that Mr. Martin was referring to the Mundakayam Association. If, however, Mr. Martin was referring to all Associations that did not belong to the Labour Department, then he protested as one of those Associations against these remarks. The financial statement showed that his Resolution was unnecessary,

because money was paid by the Labour Department to the Association, so he would, with the permission of the Meeting, withdraw the Resolution.

After some further desultory explanatory remarks, the following Resolution proposed by Mr. Waddington and seconded by Mr. Lee was carried :—“That the Budget for the coming year be adopted.”

The Scientific Department.

RE-ORGANIZATION SCHEME.

The CHAIRMAN said that if delegates looked at the Budget Statement just read they would find that they had a balance of Rs. 9,909 odd. If to this they added Rs. 1,800 promised towards the re-organization scheme last year, they would have a total of Rs. 11,709. Under these circumstances he thought they could safely say that they could meet the proposal made to them by the Madras Government, and he hoped that some one would put a proposal before the Meeting. He might mention, that the guarantees asked for now amounted to Rs. 2,300, which had been guaranteed by individuals at the present Meeting. He need hardly point out that the more guarantees they secured, the less would be the liability of all, should it ever be necessary to call upon them. He hoped, therefore, that when Delegates got back to their District Associations, they would try and get further guarantees.

The Hon'ble Mr. BARBER (Planting Member) said that the Report of the Committee appointed to deal with the scheme contained all the details of the scheme. He would, therefore, move that this Report be considered.

Mr. NICOLLS (Nilgiris) seconded the Resolution.

Mr. WADDINGTON (West Coast).—Am I right in thinking that we have now reached a stage when we find that we have sufficient funds to give the Madras Government a promise of Rs. 10,000 a year towards the cost of the scientific work of the Association? At present, however, there seems no chance of the scheme starting till after the War.

The CHAIRMAN.—I was shortly going to ask Mr. Chadwick to address us on that subject.

Mr. CHADWICK (Director of Agriculture, Madras) said that the very complete summary circulated gave all the essential details of the scheme, so he would not go into them, but would be very willing to answer any questions that might be put to elucidate any details that were not clear. The scheme was now before the Government, and the Committee had the assurance of the Hon'ble Mr. Cardew that it would receive the most careful attention. As regarded the point raised by Mr. Waddington, he thought that there would not be the slightest chance of getting a Mycologist before the War was over. To that extent, therefore, for the next year or two, that outlay would be saved. Then, as regarded the matter of opening experimental stations, his own experience was that it would be a mistake to rush the business and open all six stations at once. They should make a beginning by opening one or two stations at first; otherwise they would over-burden their Scientific Officer and the work would be done badly. The estimates as they were presented in the

Report of the Committee, represented the cost of the whole scheme in running order, which would cost the Government about Rs. 47,000. Eventually, however, with a Mycologist on a graded salary, it would cost the Government about half a lakh a year. The expenditure, however, would not reach these figures till they got the Mycologist, and of that there was no chance at present.

Mr. DANVERS (North Mysore) asked if, supposing the Department was not fully organised before the war was over, the Government would call on the Association for its full subscription, or would they only demand a proportionate amount of the expenditure.

Mr. CHADWICK said that he was not the Government, but he did not imagine for a moment that the Government would call upon them to pay the full subscription, without giving them a Mycologist.

Mr. DANVERS said that his reason for asking was that, in case they had only to pay a proportionate share of the cost, there would be a saving, which would enable them to do things on a larger scale later than if they had to pay the full amount at once.

Mr. CHADWICK.—I imagine that that will be the case.

Mr. DANVERS.—We trust that you will recommend that the subscription under these circumstances will be a proportionate one.

Mr. CHADWICK.—That will be for your Planting Member to do. I cannot conceive that the Government will want all the money at once.

Mr. MALCOLM (Wynaad) said that he was a very firm supporter of the Scientific Department and he hoped that what he had to say would not be ascribed to opposition to that Department. He was not clear however, about the proposal to open two experimental stations for each product. He had gathered from what had been said that this probably would not be the case at first. If this was the case, and seeing that they would need all their funds for running the Scientific Department, and that no one wanted to subscribe more than they did at present, it would be best to make certain of one station for each product, and if it was found later that two or more stations would be necessary, the question ought to be inquired into. The present scheme provided for two stations for each product from the first.

The Hon'ble Mr. BARBER in reply in Committee pointed out that however much was done for them, they would only have to pay Rs. 10,000, no more and no less. In considering the number of stations that should be started, one point to be considered was the locality interested. It was practically impossible for a planter in South Travancore, for instance, to take much interest in an experimental station on the Nilgiris. He might hear about it, or he might open the *Planters' Chronicle* once in a way, where he might read something about it. On the other hand if the stations were dotted about the country—not necessarily in British India, that had been recognised—this difficulty would be overcome. He thought it far better to let the scheme stand for that reason. Another point which Mr. Malcolm had mentioned was the possibility of an increased subscription. At the last Meeting it was stated definitely that there would be no increased subscriptions asked for. This scheme was not put forward with any idea of increasing the subscriptions of Associations.

Mr. MALCOLM.—I understand that whatever the subscription might be, this Association will not be called upon to spend more than Rs. 10,000.

Mr. BROWNE (North Mysore) said that it had been made quite clear that, whatever happened, they would not be called on to pay anything extra, whether they had two experimental stations or six. In these circumstances it would be prudent to have as many as they could get. Looking at the acreages of the various products, it struck him that the allocation of the experimental stations left something to be desired. For rubber with 44,000 acres one experimental station might meet the case. Tea with 64,000 acres might require two, perhaps; but coffee had 220,000 acres. It struck him that if they were going to have two experimental stations for 40,000 acres of rubber, they ought to have four or five for coffee. The Shevaroyis evidently expected a station; where was the other going to be?

The Hon'ble Mr. BARBER.—One in Mysore or Coorg and the other on the Shevaroyis.

Mr. BROWNE.—I hardly think that is sufficient, considering the large area of coffee.

Mr. D. T. CHADWICK, I. C. S. (Director of Agriculture, Madras), said that they could not increase the number indefinitely. He did not think that one officer could look after more than six stations. They would run the risk of having him tied up completely with daily returns and making him an office man altogether. As for the location of the stations, that was for the Meeting to decide.

Mr. WADDINGTON (West Coast) put in a plea for locating one of the rubber stations in Malabar. He said that his Association had instructed him to say that if two rubber stations were decided on, they were agreed that one should be in the South and the other in the North of the rubber producing area. If one was in Travancore the other might be in Malabar. Wherever the stations might be started, however, they should be in places where there was rubber in tapping.

The CHAIRMAN said that if Delegates would look at the Report on the Scientific Department, they would see where it was proposed to locate the stations which were to be in full bearing stage. It would be a matter of arrangement for Associations to say where they would like the stations put. While on this point, he would like to refer to Mr. Browne's remarks about the proportionate acreages of the various products. He did not think that this was a matter on which they could proceed on an acreage basis.

Mr. R. D. ANSTEAD (Scientific Officer) said that there was one point that must not be lost sight of and that was that rubber growers in South India had such different types of soil and locality to deal with. In Cochin, for instance, it grew in large tracts along the backwaters where the ground was low-lying and the soil alluvial. On the other hand, in other places they had rubber running up to 1,000 feet elevation on red laterite soil. These tracts undoubtedly needed different treatment, and that was the reason why the Committee came to the conclusion that it was necessary ultimately to have two stations for rubber. He would rather like to underline the word "ultimately." The scheme would have of necessity to start slowly. The most they

could do in the beginning would be to have one station for each product, and when necessary they might duplicate them. By this time the five years of the agreement would run out and it would be time to reconsider things. By that time he took it, the department would be such a success that it was decided to go on, they would probably be able to put more money into it and instead of having one assistant to the Scientific Officer, they would have twenty. He thought the expanding of the work could safely be left to the future. It was obvious that they could not start six experimental stations right off. They should start one for each product and duplicate them when they found that it was necessary to do so.

Mr. DANVERS (N. Mysore) said that certain remarks made by Mr. Anstead applied equally well to coffee, which was grown under very dissimilar conditions. They had coffee growing in places with 170 inches rainfall and they had coffee growing in places with 60 inches rainfall. But if they were going to keep the money in the Bank for three years and then take two years in starting, they would get to the end of the five years, when the whole question would have to be considered again. Another point that had been raised was the question of acreage. They should not take the total acreage, but the acreage that belonged to the Association. As the total acreage under coffee was 218,000 and as some of this did not belong to the Association, they might cut it out. It might have the effect of bringing some of the outsiders into the Association.

Mr. SIMCOCK. (Anamalais) said that last year it had been more or less resolved that an experimental station was to be on the Anamalais, and that that Association had offered to clear a block of virgin forest for the purpose. The idea was that the offer had been accepted and recommended to the Government of Madras. Apparently, however, the offer was not accepted. His Association wanted to know why this offer was not accepted, and also whether it had been recommended to the Government of Madras.

Mr. CHADWICK (Director of Agriculture) said that he was responsible for this. Of the three conditions under which the Department was to be re-organised the two most essential to the planters were the provision of experimental stations in which to carry on cultural and manurial experiments for each of the products, and the provision of a Mycologist. The proposed experimental station on the Anamalais would hardly conform to the requirements of a proper place in which to carry out cultural and manurial experiments for all the products.

Mr. SIMCOCK said that Mr. Chadwick's explanation hardly went far enough. The Anamalais were most centrally situated. It was a very large district and gave promise of being a very prosperous one, and it was felt that in giving it the go-by, as had been done, that it was not considered good enough for even one experimental station.

Mr. CHADWICK said that the stations would be put where they were necessary. The sites would be selected by the Control Committee.

Mr. SIMCOCK.—Then if we have a grievance at all, it is against the Committee?

The Hon'ble Mr. BARBER.—The Anamalais particularly mentioned their claim and it was considered. The reason why the Anamalais was not recommended in the final Report was it was felt that the

Anamalais was a virgin district, where Manurial and cultural experiments would have little value for some years to come.

Mr. SIMCOCK said that the Anamalai products had plenty of diseases and pests (laughter) which could be studied there better than in many other districts.

The Hon'ble Mr. BARBER said that pest and diseases were problems for the Mycologist. These experimental stations were not intended for Mycological experiments and study, but for manurial and cultural experiments. A soil so rich as that of the Anamalais would hardly be the most suitable for such experiments.

Mr. LEE (Kanan Devan) said that he was sorry to hear from Mr. Simcock that the Anamalais was such a pestilential place (laughter). He thought, however, that the best thing to do was to leave the matter entirely in the hands of the Committee, who would do the best possible for them all.

The CHAIRMAN said that unless there was anything further to be said on the subject they might draft a Resolution accepting the scheme. There was a point that had been made evident in the discussion that had taken place and that was that very few Delegates, except the Committee, knew hardly anything about the proposed Scientific Department scheme. All the points raised had been dealt with in the Report.

Mr. MURPHY (Mundakayam).—Will non-subscribers be allowed to visit these experimental stations and get information from them?

Mr. DANVERS immediately responded by saying that if he remembered aright, the work of the U. P. A. S. I. was carried out on altruistic lines. Those who wished to subscribe did so; but they could not be like dogs in the manger and keep all the information they gathered for themselves. In fact, it was not possible to do so. He presumed that the work done would be made available in the form of Reports, and those who wished to do so could read them.

Mr. CHADWICK said he did not think that the Government would support any form of scheme in which the Reports were not to be published. They were not like Ceylon, where planting products were of predominant importance. Here the best of the planting products only came fifth in the list; there were other agricultural products of more commercial importance. Rice, for instance, occupied something like ten million acres. It would be putting Government in an impossible position to ask them to keep the results of the work carried out secret.

Mr. MURPHY asked why a guarantee was required. His point was that it was very difficult for an Association to guarantee a sum for so many years. One Association he knew had no legal standing and could not guarantee on behalf of its members. Half the acreage might secede and refuse to pay its share of the guarantee to support the Scientific Department. It would then come very hard on the remaining members.

Mr. CHADWICK.—When we get a Mycologist, we must give him a promise of permanent employment. When the Government ask the Secretary of State to select a man, he would require a certain amount

of assurance that the appointment was for some years. If anything happened to prevent the planters utilising the services of the man, the Government would have to find employment for him, or else compensate him for the loss of his appointment.

Mr. DANVERS said that Mr. Murphy need be under no misapprehension regarding this point. The savings that they would make before they could get a Mycologist would form a Reserve Fund on which they could draw if anything of the sort happened.

The Hon'ble Mr. BARBER said that Mr. Murphy's point was very pertinent. The U. P. A. S. I. could give a guarantee to Government, but it could not rely on the District Associations to support that guarantee. He thought that any large secession of Associations or of acreage ought to be guarded against. They ought to have a Reserve Fund and it was for that reason that the Committee proposed starting a guarantee fund, in view of meeting unforeseen contingencies such as districts going out of the Association.

Mr. MURPHY said that the Committee of the U. P. A. S. I. might take bonds from each Estate. He was not able to give a guarantee for his Association for five years.

Mr. DANVERS said that the point might be settled by each Association and its members. His Association had guaranteed so much for its Scientific Officer Fund, but it had not taken bonds from its members; it trusted them. If honour failed, everything failed.

Mr. MURPHY said that supposing his Association even took bonds from its members and they afterwards seceded, how was his Association going to proceed. It could not go into Court, as it had no legal status. All he wished to point out was that though his Association approved of the Scientific Department Scheme, chiefly because it cost them nothing, it was not in a position to give a definite guarantee. It was not in the least likely that his Association would secede; but he was simply putting a possible condition of affairs before the Meeting.

Mr. WADDINGTON (West Coast) pointed out that this question of a guarantee was no new thing. In 1913 the Government had asked them to renew their guarantee to the Scientific Department, and all the delegates said that their Associations would do so. There was no question of legal status about the matter. They promised to pay and the Association trusted to the honour of its members and there had been no difficulty.

The CHAIRMAN said that Mr. Waddington had put the matter in a nutshell; at the same time there was something in what Mr. Murphy had pointed out. He himself had had the idea for a long time that each District Association should become an incorporated body, it would give the Associations a hold on their subscribers. He thought that it was a matter that ought to be taken up by all Associations in the coming year.

After a little more desultory discussion in Committee, the following Resolution was proposed by Mr. Lee, seconded by Mr. Waddington and carried:—

"That the Report of the Scientific Committee be adopted and that the location of the experimental stations be left to the decision of the Committee. That this Association do put on record its appreciation of the offer made by the Government of Madras and that a vote of thanks be tendered to the Committee for their services."

The CHAIRMAN.—The passing of this Resolution marks another red letter day in the annals of this Association. Last year we inaugurated a big thing in the establishment of the Labour Department. This year we have followed with another equally useful department, which will come into working, I hope, at no distant date. A hearty vote of thanks is due on behalf of the Committee to the Madras Government, and in that vote I would like to include Mr. Chadwick, for all the trouble he has taken over this scheme. (Applause).

Mr. CHADWICK thanked the Meeting very heartily for the cordial vote of thanks and for the kindly way in which it had been responded to. He did not think that it was at all necessary, for it had always been a great pleasure to him to be present at these Meetings annually. He only hoped that the development that would now take place would be of the utmost benefit to all planting districts. Planting and agriculture were very closely associated, and as the Director of Agriculture he was under an obligation to the Planting Member for recognising this and kindly coming to preside at their Conference at Coimbatore recently for three days. He was very glad indeed to welcome Mr. Barber there.

The Hon'ble Mr. BARBER said that they had thanked the Madras Government through Mr. Chadwick, and he would like to thank the Native States, which were also supporting the scheme. (Applause).

THE SCIENTIFIC OFFICER'S TOUR.

Mr. R. D. ANSTEAD, in consultation with the delegates, settled his tour programme for the coming year.

THE EUROPEAN ASSOCIATION.

The Hon'ble Mr. BARBER read the correspondence with the European Association, Madras Branch, giving the result of the work that had been done by that Association, and a copy of a letter that had been written by Mr. T. E. Welby for the Association's Journal in Calcutta on the future treatment of alien enemies.

To

THE SECRETARY,

European Association,

Calcutta.

SIR,

At the suggestion of the Madras Committee of the European Association, I address you on the very important subject of the status and economic opportunities which Germans should be conceded in this and other parts of the Empire after the War. This letter, of course, expresses only the personal opinions of an individual member, but I believe that similar opinions are held by the vast majority of fellow-members of the Association and that action on the general lines herein suggested would be widely supported.

Before proceeding further, I should deal with a preliminary technical objection, which was tentatively raised when Mr. Thonger and myself spoke on the subject at the General Meeting of the Madras Branch of the Association. It was then remarked that our body is the *European* Association and not an anti-alien Association. I agree; but that fact tells most strongly in favour of action by the Association against Germans. In the first place, we are justified in taking up a distinctly pro-British attitude on all matters involving the stability or prosperity of the British Empire, because the presence and useful activity of all Europeans in India, whether British or others, are rendered possible only by the British Raj. The maintenance of British interests in India is a general European concern. Secondly, as a European Association, it is incumbent on us to maintain the honour and repute of European civilization, and we should fail in our duty if we did not emphatically condemn the loathsome barbarism of the German people in this War and make it more than plain in the eyes of Asia that, on account of that conduct, the Germans are outcasts from our community until they have made full amends. For these two reasons, the technical objection is in fact not only not an objection to the policy herein suggested but an argument for it.

It is unnecessary to recapitulate here the crimes of Germany. Every one of us knows that she has violated the most sacred compacts, that she has made desolate the country she was bound in law and honour to protect against aggression, that she has waged war on non-combatants of both sexes and on children, and directed her guns at the monuments of piety and philanthropy, bombarding cathedrals and hospitals indiscriminately, and that she has prostituted all the resources of science to the production of weapons which the whole civilized world has long regarded as illegal, and which she herself was explicitly pledged not to employ. More, she has done all this not shame-facedly but with exultation, glorying in her infamy. With her Government the Governments of the Allies will deal; with her people we and all other British subjects must concern ourselves.

But are the German people responsible? It is true that they have not that control over the executive which the British, French or American peoples possess. But were the German people not heart and soul with the Prussian militarists there would have been indignant protests against the violation of Belgian neutrality and the outrages which have followed it. Except for a few Socialists and a handful of others, the whole German people have identified themselves with the policy of frightfulness. The very children enjoy a holiday in celebration of the sinking of the *Lusitania*. How then can the people be regarded as less responsible than the Government?

Having thus summarily cleared the ground, as I hope, I venture to outline the policy which it seems desirable for the Association to adopt towards Germans after the War. It will be well to consider it under two aspects, for there are certain things which lie entirely within the competence of the Association and certain others which the Association can only urge upon the Government.

As for the first, I am of opinion that individual members of the Association should be invited to pledge themselves not to employ any German subject or to afford any German subject social support until such time as Germany has paid her war indemnity in full and the German people have voluntarily turned away from their present leaders

The question of business dealings with Germany is obviously difficult. I am disposed to think that instead of trying to follow the counsel of perfection not to deal with Germans at all, the best plan is the stimulation of public demand for the products of the British Empire and of allied countries and the exposure of extravagant German claims to superiority. By such methods, dealings with Germans will be restricted. But I wish to suggest also a system of brief reports on German efforts at re-establishment in India after the War. I would lay particular emphasis on vigilant observation of German enterprises directed from within other parts of the British Empire, or from neutral countries and apt to be popularly regarded as non-German. In the prosecution of this policy, it would be well to keep in touch with the new anti-German organisation in England, formed, by an interesting coincidence, in the very week we discussed the matter in Madras, and with the French League over which the well-known poet and dramatist, M. Richepin, presides and which has prepared an invaluable list of marked German firms and enterprises.

Turning to matters on which the Association can only approach Government, we ought, I think, to ask the Government of India to abandon finally the practice of appointing Germans to the service of the State. This is not in itself now of much importance, though formerly a good many Germans were employed in the Educational, minor Scientific and Forest Departments, but as a matter of principle the request should be made. We should also demand some restriction on German Missions in India. It is not seemly that the kinsfolk of those who have wrecked the Cathedrals of Belgium and France should preach Christianity to Indians, or that possibly anti-British ideas should be inculcated in German Mission schools. If the Government are not prepared to limit German Mission work to ministry to German subjects in India, they should at least deny all aid from State funds and all official countenance.

But by far the most important matter on which the Association ought to approach the Government is that of fiscal reform. I am aware that there may be many Free Traders in the Association, and I do not propose to open any controversy on the old lines. But the strongest Free Trader will admit that the endeavour to capture German trade must break down when peace is restored if those who now invest money in new indigenous or other British enterprises have no guarantee against a renewal of German competition. Whatever may be our individual views on Tariff Reform, we can at least all agree that as a measure designed to meet exceptional conditions and with a time limit of, say, ten years from the conclusion of hostilities, protection against German competition is necessary. It is no sufficient argument to say that Germany will be financially and otherwise handicapped when the War ends and so unable to resume competition. What will be the condition of British finance and industry by that time? And even allowing that Germany will be at a disadvantage, why should we not increase that disadvantage by tariff for the period during which the new British Industries are growing up? A further and very powerful argument for protection against Germany is that it will enable the British Empire to accord valuable favours to its Allies, thus in some degree compensating Belgium, and also helping to consolidate the friendship between Great Britain, France and Russia which German intrigue will almost certainly try to break up after the War.

It is possible that some who read these words will protest against a policy of "persecuting" the Germans after the War. To them it may be replied that this policy is suggested by justice, prudence and gratitude, and not by mere spite. Justice must be done on Germany. Prudence demands that, though we may indulge in the luxury of hopes for German regeneration, we shall take note of the reiterated declaration that England alone is the real enemy of the Germans and guard against a future single combat between ourselves and Germany. Gratitude to Allies suggests that we shall not, after the War, treat their subjects and Germans alike.

This is necessarily only the merest outline of the policy that seems proper for the Association to adopt. Readers will be glad enough to fill in obvious lacunæ and to excuse the statement of some facts which might have been taken for granted. I earnestly commend the subject to the attention of the Association, with a view to early action, before increasing familiarity with the foulest facts in the history of warfare dulls indignation.

We must try to remember that we are eye witnesses of the most critical struggle in which civilization has ever been involved. It is not merely the result of the War that matters. It is of incalculably great moral importance that every individual or organisation in any sense representing civilization should avoid the slightest subsequent condonation of the German attempt to subvert its very basis. To treat the German, after the War, until he has fully repented, as if he had been an honourable or humane enemy, would be to lower moral standards finally. Every subject of the Allies should feel that he is, in however humble a degree, one of the trustees of civilization in this matter, and that, in that degree, it rests with him whether this War shall go down to later times as a crime duly punished, or merely as a military adventure which turned out unfortunately for Germany. We who stand for Europe in the view of Asia have a peculiar responsibility here, and I trust that we shall not fail under it through lack of imagination, fear of seeming to take ourselves too seriously, or that curious sentimentality which is more affected by the capital punishment of murderers than by the deaths of the victims.

{Signed} T. EARLE WELBY.

Mr. NICOLLS (Nilgiris) proposed and Mr. P. G. TIPPING (Coorg) seconded the following Resolution:—"That the U. P. A. S. I., agreeing with the policy of the European Association, would suggest that all members of the Association should give effect to the Resolution, by becoming members of the European Association, and recommends that Mr. Welby's letter be published in the Book of Proceedings."

Prevention of Thefts of Rubber.

Mr. WADDINGTON (West Coast) asked whether the Hon'ble the Planting Member had been able to do anything so far as regards the question of securing legislation for the prevention of thefts of rubber. If not whether he was prepared to do anything further on the matter.

The Hon'ble Mr. BARBER said that he had very little explanation to offer. On the 25th September, 1913, the Government of Madras had asked for certain evidence regarding thefts from numerous districts.

He gave a summary of the correspondence that had taken place on the subject. There had been no extensive thefts of rubber, but a preventive measure like the Travancore Ordinance was advocated as a safeguard when the price of rubber rose again. Rubber was not a finished article and such a measure would not be putting restrictions on trade. The Government, however, pointed out that no case had been made out for legislation on the lines of the Travancore Ordinance. He could not go any further with the matter until he got more information regarding thefts of rubber. If he could put forward concrete cases of theft in which the provisions of the Penal Code were inadequate to meet the case, he might do something more.

Mr. WADDINGTON said that he could understand Mr. Barber's position in the matter. It was quite true that there had been no general stealing of rubber; but there was one argument that he would like to put forward in case they had to appeal again. In both Travancore and Cochin a similar licensing enactment had been passed. As long as there were enactments in the Native States and none in British territory, all a thief had to do in the Native States was to step across the border to avoid all trouble altogether. It seemed rather foolish to wait until harm was done, which seemed to be the view of the Madras Government in the matter.

THE Hon'ble Mr. BARBER said that he did use that argument in conversation, but it did not carry any weight.

Mr. WADDINGTON having read the Resolution passed last year, said that he did not think there was any need to re-affirm that Resolution. He was quite prepared to let the matter drop. If concrete cases of hardship occurred, he would bring the question up again.

The Meeting at this stage adjourned till 3 P.M.

Second Day, Tuesday, 17th August, 1915.

AFTERNOON SESSIONS.

Roads and Communications.

The delegates met again at 3 P.M.

The CHAIRMAN said that they would take up that afternoon the subject of "Roads and Communications." He had no introductory remarks to make, so he would call upon Mr. Guy Turner to open the discussion on Feeder Roads in the Shevaroy's.

Mr. GUY TURNER (Shevaroy's) said that it seemed to be a tradition in the Association that the Shevaroy Planters' Association should bring up the question of roads. There had been much discussion in the past regarding the Manjavadi Ghaut road, and he was asked to bring up the subject once again. His Association urgently wanted the Yercaud-Glazebrook road to be connected with the head of the Manjavadi bridle-path, as that bridle-path was a link with the Salem Road which led to the plains. The Yercaud-Glazebrook road stopped at the Glazebrook Estate. It was of great importance to the Estates concerned if the piece of road he had mentioned could be completed, for then there would be an open unbroken road for the transport of produce and Estate requirements and it would release a large number of coolies for work on the Estates who were now engaged in carrying goods that had to be transported by coolies. The distance to be connected was only two miles, and the cost of the road was estimated to be Rs 9,000. The Manjavadi bridle-path stopped at the foot of the hills and was unconnected with the Salem cart road. A large amount of money had been spent on the Yercaud-Glazebrook, which, at the present moment was useless, as it lost itself out in the jungle. Two years ago, through the medium of this Association the matter went up before Government for re-consideration, who said that they would not spend any more money on these roads. The Government, he knew well, would consider the matter favourably if only the planters interested would contribute the money; but the planters, naturally, he thought, were averse from contributing any money though they were quite prepared to give the land free of all cost, in which case the planters concerned would be sacrificing a large number of trees, both rubber and coffee. Further there was no precedent at all why the planters of the Shevaroy's should be asked to contribute money for the cost of a road. He could assure the meeting that the completion of the road was a great necessity, so he would ask the delegates to pass the following Resolution:—

"That the U. P. A. S. I. do strongly urge on the Government of Madras the great necessity of connecting the Yercaud-Glazebrook road with the top of the Manjavadi bridle-path and the linking up of the Manjavadi bridle-path with the Salem-Harur cart road in the plains."

Mr. C. H. BROWNE (North Mysore) seconded the proposition.

The Hon'ble Mr. BARBER said he supposed that Mr. Turner would remember that the last time the matter came up which was in 1912, the answer given was that the Government had repeatedly expressed their unwillingness to spend more money on this road. In view of the special circumstances involved however, the Government asked to be informed whether the District Board and the planters would combine to find half the cost, in which case they would find the other half. The cost of the road, according to Government, was only Rs. 5,500, and if it was worth so much to the station, he thought that the District Board and the Shevaroy Association could easily combine to find the money. He wished to know if this offer had been considered by the Shevaroy Association.

Mr. TURNER.—Would you mind giving me the date of that letter?

The Hon'ble Mr. BARBER.—September 15th, 1913.

Mr. TURNER explained that after that letter was written, H. E. the Governor had visited Yercaud and a deputation of the planters waited on him and the outcome of the Meeting was that the Hon'ble Mr. S. D. Pears wrote a letter to the Secretary of this Association which was to the effect that Government would favourably consider the scheme if the planters resident in Yercaud interested in the scheme came forward and contributed to this scheme. The Government then awaited definite proposals before they would take any further action in the matter. As he had said, however, none of the planters would provide money, though they were willing to give the money for this particular road.

The Hon'ble Mr. BARBER, asked what attitude the District Board had taken in the matter.

Mr. TURNER was unable to say.

The Hon'ble Mr. BARBER said that he did not think it worth while taking up the matter again until more information was forthcoming.

After some further discussion, the matter was allowed to drop. Mr. Turner withdrawing the Resolution that he had moved.

Postal Service in Hassan and Kadur Districts.

Mr. HAYWARD (South Mysore) in moving the following Resolution on the above subject said that the postal service in Kadur and Hassan Districts was steadily getting worse. It was chiefly due to the disgraceful condition in which the tonga ponies were maintained. Their complaints to the Postmaster-General had absolutely no effect. He therefore asked the Meeting to pass the following Resolution:—

“Owing to the representations of the South Mysore Association having no effect on postal communications in the Hassan and Kadur Districts, this Association requests the Postmaster-General to have more drastic steps taken for its improvement.”

Mr. A. B. BOYD (Bababudins) seconded the Resolution, which was carried.

The Arsikere-Mangalore Railway.

Mr. J. HAYWARD (South Mysore) speaking on this subject, said :—

This proposed Railway has, as, no doubt, most of you are aware, received a check at the eleventh hour by the Mysore Durbar hesitating about the construction of the Mysore section. One object, if not the chief object, of the formation of the Mysore Planters' Association over fifty years ago was to urge the British and Mysore Governments to construct a direct line through the Malnaad of Mysore to the coast, and my Association, a branch of the old Mysore Association, has been hammering at the matter ever since. Of recent years the matter took a more favourable turn, and when the Dewan of Mysore visited Saklaspur two years ago, and assured us that "on the very day on which the British Government sanctioned their part of the line to South Canara, the Mysore Durbar would commence construction," my Association felt its hopes were near realisation. Therefore, gentlemen, you will easily understand what a great disappointment the present set back is to my Association.

But I consider there is still a hope that the Arsikere-Mangalore Line will become an accomplished fact, and my hope is based on the remarks made by the Dewan of Mysore. Firstly, a correspondent writing to the *Madras Mail* alluded to a remark made by the Dewan at the Economic Conference, that had apparently been unreported and overlooked. He said:—"If investigation did not show that the new proposal was more beneficent, they would return to the old Mangalore scheme." Secondly, the Dewan, in his closing remarks on the subject in the Mysore Legislative Council on the 27th July, said—"I have no doubt any alternative line to the coast which we may construct will also benefit the planters." These two statements are the foundation of my hope, because I consider if the Mysore Durbar sincerely wishes to improve, open up, re-populate the Malnaad, and help us planters, nothing but a direct line through the Malnaad to Mangalore or its vicinity can fulfil these wishes. I would now ask this Association to pass the following Resolution:—"This Association regrets the contemplated abandonment of the Mysore section of the Arsikere-Mangalore Railway, and trusts that the Mysore Durbar will give the matter fuller consideration, in conjunction with the Mysore planters, before a final decision is arrived at."

Mr. S. H. DENNIS (Bababudins) seconded the motion.

The Hon'ble Sir HUGH DALY, the British Resident, said :—Your Chairman has kindly permitted me to explain the little misunderstanding about the attitude of the Durbar. I am not speaking with authority, but I am merely telling you what I believe to be the real facts. Mr. Gillan, who is now President of the Railway Board, came here about a year ago, after the commencement of the War, and had a talk with the Dewan and myself about Railway communications. He said that there was a great deal of talk going on in the Legislative Councils and the newspapers about the shortage of rolling stock. No doubt, there was a shortage of rolling stock, but the rolling stock that exists, he said, was much hampered by congestion in the ports, because there were so few ports. It was considered by the Government of India that it would be a great advantage if more ports could be opened on each side of India. If it had not been for the War, a certain number of Engineers would have been put on special duty for inves-

tigating the question of finding new ports on each side of India. Therefore, when he came to the Arsikere-Mangalore project, Mr. Gillan said that he thought in Imperial as well as Durbar interests, it would be better to wait a little, and see whether they could not find somewhere within reach of Mysore a port that would be open to shipping at all times, a port which Mangalore can never be. It is not more than an open roadstead. The Durbar upon that was prepared to wait a reasonable time, while other projects were being investigated, the understanding being that if no suitable all-the-year-round port could be found open, they would go on with the Mangalore-Arsikere Project. That, I believe, is the correct attitude of the Durbar.

As a matter of fact, the Durbar is taking up the question of the possibility of connecting up with Bhatkul, which is just in the south of North Canara, a few miles north of the Mysore border. There is a great possibility of making a harbour there, and the line down the ghaut is easier than in the case of the Mangalore-Arsikere Line. That was one of the matters discussed at Simla last month, when the Dewan and I were there. It has been arranged unofficially with the Bombay Government that the matter should be investigated and a preliminary enquiry held. The matter will be further taken up if the preliminary enquiry is favourable, solely on account of the importance of finding an all-the-year-round port. This is what has caused the Mangalore-Arsikere Project to be held up. If we fail to find a suitable harbour, the Durbar will revive the other scheme.

Mr. HAYWARD thanked Sir Hugh Daly for his valuable information. It had been a great source of trouble to them that they had not been able to get a definite statement of the reasons for or against the project.

Sir HUGH DALY.—It was an unofficial discussion between the members of the Railway Board, the Dewan and myself. I do not think there is anything on record about the matter.

Mr. J. G. HAMILTON said that perhaps this was hardly the time to raise an objection to the consideration of the Bhatkul scheme, but he was now a resident of Mangalore, a place that he had known any time for the last 30 years, so he knew something of the country. Although he must of necessity, as a South Mysore planter, be somewhat prejudiced, he thought that Mangalore must remain the natural port of Mysore. If Bhatkul was made the port, they could not transport Mangalore there. It was a big town, the centre of old established industries, not only coffee, but large tile works and other industries. The result would be that they would have to run a branch line from Mangalore to Bhatkul, carrying it across at least one large river, if not two, and several smaller streams. They were all getting conservative and very few would be willing to go through all that. The Mangalore-Arsikere Line passed through thickly populated country, and the passenger traffic would develop enormously. He was aware that it was an expensive project, and the statistics did not show an immediate profit; but, knowing what he did of the country, he was sure that the Railway down to Mangalore would bring development eventually, and would be a paying line. He was aware that Mangalore would never be anything but an open roadstead, still, it had always been able to cope with the shipping that came to it. It was true that there were three or four months in the year when it was scarcely ever possible to ship cargo, but those were months of comparative idleness.

But, during those months, the passenger traffic was at its height. He was prejudiced, like Mr. Hayward, in favour of the line, because he belonged to the same Association, but he really believed that when the matter was fully considered, it would be found that Mangalore was the natural port for Mysore.

The RESIDENT said:—The Resolution expresses the hope that the Durbar will give full consideration to the Mangalore-Arsikere Project, with the Mysore planters, before a final decision is made. I think I can promise that without any Resolution being put. Without any desire being expressed, the Durbar would welcome and invite the opinion of the planters before they made up their minds. It is a big business for the Durbar to decide, and they are anxious to get the opinions of all interested. As I mentioned, the present investigations are purely preliminary; they are being made solely with the object of deciding whether the project is worth proceeding with. It is quite possible that it may be decided that it is not worth while proceeding with. The Bombay Government consented to a preliminary investigation, on the understanding that will leave them a free hand, absolutely without prejudice. If the result is to show that there is something in the project, the Durbar will then approach them officially and ask for their views. I can safely promise that if the time ever comes for approaching the Bombay Government, the Durbar will at the same time approach the planters, and ask them for their views. I am prepared to promise that now.

Mr. HAYWARD said that he was quite prepared to withdraw the Resolution. The reason why he pressed it was because they wanted the matter fully considered before any change was made. It was a matter that had been before them as an accepted and desirable proposal for fifty years, which had been suddenly abandoned, and they could get no information regarding the reasons for this step. He did not think that they had been fairly treated. All the information they had been able to get was from outside sources; there was no direct information afforded them.

The RESIDENT.—I am inclined to think that it would be wiser not to press the Resolution. I should like to say that if there is anything on which you want information, I shall be most glad to help, if you will apply to me.

The Resolution was then withdrawn.

The CHAIRMAN said that before passing to the next subject he thought an expression of their thanks was due to Sir Hugh Daly for the useful information that he had been able to give on this subject.

The Cochin Harbour.

Mr. WINTERBOTHAM (Central Travancore), in opening this subject, said:—As you are, no doubt, well aware, at certain seasons of the year, that is, during the South-west Monsoon, the shipment of produce from the West Coast is most difficult, and, in fact, in some cases impossible, owing to the lack of a serviceable harbour, capable of working large steamers. In Cochin, we have the making of an ideal deep-water harbour, capable of accommodating large steamers, but it will be necessary first to dredge to sufficient depth the entrance over the bar, and, wherever necessary, in the harbour itself. The scheme

is not a new one ; it has been talked of for years, but it has only been within recent years that it has been seriously considered by the Government. A special Engineer was appointed by the Government last year to investigate and report on the scheme. I regret that I am unable to give you any details or particulars of the Report, but I understand that the preliminary proceedings proved that the scheme was feasible, and Mr. Allan Campbell the Engineer in question was sent to Bombay to purchase a special type of dredger, the only one of its kind in the East, for the purpose. Unfortunately, on his arrival in Bombay, he found that the dredger was acquired for use in the Persian Gulf, in connection with War operations, and since then I understand that nothing has been done. But although active work in the harbour has ceased, for the time being only, we hope, merchants of Cochin have not been idle, and have introduced the Landing and Shipping Act, the idea being to have money to carry on investigations. By these means they raised about Rs. 60,000, but it must be remembered that it was a bad year for trade, owing to the outbreak of the War. Had it been a normal year, I have no doubt that Rs. 2 lakhs could have been collected. Mr. Chadwick told us this morning that the Government helped those who helped themselves, and I am sure that you will agree that Cochin is a most deserving subject, and I hope that the Government will see their way to continue the dredging operations at once.

A necessary adjunct of any harbour scheme is that of feeder railways, to deal with the increased volume of trade that is bound to occur when the harbour scheme is an accomplished fact, but I believe that the Wynaad delegate is dealing with this subject, so I will not touch upon it. I will only ask you to support the following Resolution :— “That this Association is strongly in favour of the construction of a harbour at Cochin, which would be open throughout the year and that the Government be asked to continue dredging operations at once, so that the feasibility or otherwise of the scheme may be definitely settled at an early date.”

Mr. W. A. LEE (Kanan Devan) in seconding the Resolution said that the proposed Cochin harbour would be a most valuable outlet for much of the produce of about 10,000 acres of Planting District in Travancore.

Mr. SIMCOCK (Anamalais) said that it would be the natural outlet for the produce of the Anamalais.

The Resolution was then put to the vote and was carried unanimously.

Railways in Planting Districts.

Mr. WHITTON (Wynaad) opened the connected subject of Railways in Planting Districts in the following speech :—

It falls to the lot of a delegate from the Wynaad to put before you a Resolution with regard to a new scheme of Railway, which you have all probably read about, in a recent issue of the *Madras Mail*. I refer to the proposed Shoranur-Wynaad Railway. This line, commencing at Shoranur, would run through the Ernad up the Karhoor Ghaut, and then behind the Western Ghats into Coorg and Mysore, linking up with the existing Railways in the Mysore State. It is, I think, fitting that this proposed Shoranur-Wynaad Railway should emanate here, from a representative of the Wynaad Planters' Associa-

tion ; for, as has been pointed out, a railway scheme which included the Wynaad was first mooted by the Wynaad Planters' Association some 35 years ago. To-day, I ask you to consider the question of this Railway from every point of view, and, in the first place, I would ask you to understand that one of its chief objects would be to serve as a feeder line to the proposed new harbour at Cochin. Assuming it is found that the engineering difficulties with regard to Cochin harbour can be overcome Cochin must surely come to take its place as one of the ports of the Empire, and nothing can really stop it eventually becoming such, although opposition may come in which could at the most only delay matters.

With regard, then, to this railway, commercially it will most probably be required, and from our point of view it is, I think, obvious that a railway which would run through portions of the planting districts of Malabar and the Nilgiris, Coorg and Mysore would be a very great advantage to these places. It is not for me to bring forward the benefit that this line of Railway would bring to the respective Governments concerned. I think I may say, however, that the idea of this Railway is already receiving the attention of representatives of the Madras Government, and, as Sir Hugh Daly has kindly intimated, when it is brought before the Mysore Durbar, the project will be given the full consideration it deserves. I would ask you then to support the following Resolution :—" That this Association strongly advocates the proposed Shoranur-Wynaad Railway scheme, and that the Government be asked to proceed with the survey of the line as soon as possible."

Mr. WINTERBOTHAM (Central Travancore) seconded the Resolution.

Mr. WADDINGTON (West Coast) said that this scheme, together with that of the Cochin harbour which has just been passed, had the strong support of the West Coast Planters' Association. As Mr. Simcock had said a great deal of produce would go from the Cochin harbour when it was completed and this would be facilitated by a Railway running through the planting districts of the West Coast.

Mr. J. S. NICOLLS (Nilgiris) in supporting the Resolution said :—

Mr. CHAIRMAN AND GENTLEMEN : In supporting Mr. Whitton's Resolution, I have not done so, because the proposed Railway would be of any special benefit to myself, but with the knowledge that Railway development brings prosperity to a country and the inhabitants of it. We all, I feel, would like to have Railways near our doors, but the chief aim of any Government must be the opening of her country, and as far as possible combining that policy by benefiting existing industries. I am certain that the proposed Railway scheme will go a long way to accomplish these ideals, starting, as the Wynaad delegate has told you from Shoranur passing through the Ernad Taluq, Wynaad, into Coorg linking up with Mysore State Railways, eventually finding an outlet at Cochin. The delegate from Central Travancore has in his speech proposing his Resolution pointed out to you the advantages of a harbour at this port. " A harbour that would be open all through the year and capable of accommodating large steamers." If this becomes an accomplished fact, it will have more advantages to the Planters than an open port throughout the year. It will attract more Steamship Companies to the West Coast, now kept back from competition by unsafe roadsteads and by the uncertainty of being able to take on cargo when

they call. Constantly now, more especially so in the South-west monsoon, steamers call at our West Coast ports and have to leave without taking on cargo owing to the impossibility of getting lighters out to them, and at other times lighters when they get out to steamers have to return as it is impossible to put the cargo on board. With a harbour capable of containing steamers, these difficulties would be removed. Healthy competition among Steamship Companies would be born, which I feel certain would mean a reduction in freights benefiting not only shippers from Cochin alone but those from all ports along the West Coast. There would spring up at Cochin, as there is now at Colombo, a large produce market. One only has to look at the Colombo Tea and Rubber sale catalogues to follow that there must be enormous advantages to the seller in having a competitive market at his doors, and I feel certain that such a market would not only benefit planting products but those generally of the West Coast. Feeder Railways would be a necessity, and I think the proposed scheme would not only insure the prosperity of the harbour, but would benefit existing planting industries and open up thousands of acres, now lying waste, and so increase the prosperity of the country.

Mr. J. G. HAMILTON said that, without in any way wishing to take a hostile attitude with regard to this scheme, he would like to know, for the sake of information, whether the traffic would be constant. It was just as well to be certain of this, because it might be that the traffic would go to other Malabar ports in fine weather and use Cochin as a port of refuge.

Mr. WADDINGTON said that his produce always went to Cochin.

The CHAIRMAN said that the obvious reply was that the harbour of Cochin could take far more shipping than any of the smaller ports.

Mr. J. S. NICOLLS (Nilgiris) said that if a produce market was opened at Cochin, it would make it far more attractive to produce than the smaller ports.

Mr. SIMCOCK (Anamalais) said that the whole of their produce on the Anamalais between May and October had to be sent to Madras, owing to there being no harbour on the West Coast open to shipping in those months.

[COMMITTEE].

Mr. J. G. HAMILTON said that he was not speaking entirely for the coffee interests. He was looking at the map and he found that the distance from the proposed railway to the coast line was very small. He wished to emphasise the fact that he was not speaking in opposition to the proposal, but he wanted information. The Chairman had replied that there would always be additional shipping at Cochin. They must not rely on last year's results, but, bad though that time had been, they had had no difficulty in clearing from the Malabar ports. He wanted to be convinced, and he wanted other critics also to be convinced, that there would be sufficient and constant traffic to justify the construction of the line when they were also demanding money to be spent in other directions. Of course, if there was an open harbour in existence, he would not have a word to say; but when they came to the question of constructing a long Railway he wished to have it clear that all the traffic that was likely to use the line would make it pay.

Mr. NICOLLS said that it was to be presumed that the Government would satisfy themselves on the point that Mr. Hamilton had raised.

Mr. HAMILTON.—That is my point.

Mr. NICOLLS.—The Government will do that.

Mr. DANVERS (N. Mysore) said that as far as his district was concerned it was not affected by either scheme. It would neither benefit nor be hurt by the Mangalore-Arsikere Scheme, though it had always supported it. As regards the Cochin scheme, it would help North Mysore very little indeed. He did not wish to say anything or do anything that would prejudice either scheme. What he would like to propose, however, would be to extend the Railway from Cochin to Bhatkul, so that they could then choose whichever port suited them best. He would like to amend the proposal so as to make the line run from port to port.

Mr. J. G. HAMILTON pointed out that Mr. Danvers amendment would come up against the old Railway bugbear of the question of short leads.

Mr. WADDINGTON said that he thought it ought to be understood that if the Railway was constructed on the metre gauge, with the exception of 26 miles between Shoranur and Olavakot they would have a metre gauge connection from Poona to Tuticorin. It was not at all a matter of short circuiting. Mr. Hamilton had spoken about the harbour; it was a great thing to be able to send their produce to a harbour at which they would be able to ship at any time of the year.

The CHAIRMAN put Mr. Whitton's Resolution to the Meeting when it was carried, and was confirmed in open Meeting.

Mr. C. DANVERS then moved:—"That the Wynaad Resolution be supported, and further that the Mysore Durbar be urged to carry out their proposed project with regard to Bhatkul, or other suitable port on the West Coast, and by this means link up the two ports of Cochin and Bhatkul, giving equal facilities to the planting districts along the line."

The Resolution was seconded by Mr. P. G. Tipping.

Mr. HANNYNGTON, (Commissioner in Coorg), pointed out that the engineering difficulties in connection with the scheme were heavy enough, whichever of the routes suggested was adopted, but Mr. Danvers' Resolution added to the difficulties, by putting another ghaut at the other end. This double ghaut, one at each end of the line, made matters much more difficult.

Mr. DANVERS pointed out that different Governments would have to meet the cost.

Mr. HANNYNGTON remarked that the line as a whole must pay, and it did not help to this end to make the cost of construction as heavy as possible.

The Resolution, after some further discussion of a desultory character, was eventually carried.

The Vaighay Valley Railway.

Mr. A. J. WRIGHT (Kanan Devan) said that the subject of this Railway had been before the Meeting many times, though it was possible it could not claim the same antiquity as others. The matter came before the Meeting in 1910, when the following Resolution was passed:—"That this Association urge upon the District Board of Madura the necessity for taking in hand at an early date the construction of the Vaighay Valley Railway, for which they have facilities in the shape of the Railway Cess already collected and to be collected annually in future, until the necessity for it ceases." The Resolution that he now wished to bring forward was:—"That this Association respectfully urges upon the Government and upon the District Board of Madura that an early start be made with the Vaighay Valley Railway." They were in a more or less unique position of having the money, in the shape of a Railway cess. When the line was surveyed there were two alternative routes. One to Madura and the other to Kodaikanal Road. As far as the Kanan Devan Association was concerned, it made very little difference which route was adopted, and they said so. It was eventually decided to start the Railway from Madura. After some trouble he had been able to get reliable figures of the traffic that was likely to use the line. From Kanan Devan it amounted to 15,000 tons, and from Bodiyanakanur to 16,000 tons, which at existing cartage rates amounted to about Rs. 3½ lakhs. There was a large quantity of traffic either way, for the Railway, and as far as Kanan Devan was concerned, it shortened the cartage by about 47 miles leaving them only ten miles from the foot of the hills.

Mr. WINTERBOTHAM (Central Travancore) seconded the Resolution, which was carried. He pointed out that the Estates in Peer-made would probably send all their produce down that way. The Meeting at this stage adjourned till 10 A.M., on Wednesday, the 18th instant.

Third Day, Wednesday, August 18th, 1915.

The delegates met at 10 A.M.

The CHAIRMAN said.—Gentlemen, yesterday at mid-day we were rather ahead of our Programme, but when we adjourned last evening we had several items allotted to Tuesday still left over. This morning was set aside for Agricultural matters, and I wish to stick to this programme as far as possible. Mr. Murphy, I believe, wishes to speak with reference to our Planting Member's Report, and we shall start off with this after which we will go on with agricultural matters. Dr. Leslie Coleman has very kindly agreed to address us on the work he is doing with regard to coffee pests.

Mr. Chadwick and Mr. Harrison, Government Agricultural Chemist, are also present. We had also hoped that Sir Frederick Nicholson, Director of Fisheries, would be present, but unfortunately he was unable to attend, and has deputed Mr. Menon, Oil Chemist to Government Fisheries, to speak to us regarding Fish Oil, Manure and Insecticides. With the present difficulty of procuring certain manures on account of the War we may have to turn to Fish Manure as a substitute, and I am sure Mr. Menon's remarks will be followed with interest.

There are some very interesting samples of rubber from various Estates in South India now on show at the office, but beyond this no samples of products have been sent up this year. I was most particularly asked by several gentlemen who sent samples that they should be judged and reported on during the Meeting. I would ask you this morning to appoint a small Committee to judge and report on these samples.

I must also ask you to increase the Committee of the Scientific Department, which at present seems to be reduced to three, the Hon'ble Mr. Barber, Mr. Anstead and myself. If we are to deal with the new Scientific Scheme and the allocation of stations I think a more representative Committee is necessary.

Rubber Exhibits.

MESSRS. WHITTON, WADDINGTON, MURPHY and MORELL were appointed to report on the rubber exhibits.

The Scientific Department Committee.

The names of Messrs. Waddington, Simcock and Malcolm were proposed as additions to the Scientific Department Committee.

Mr. TIPPING (Coorg) asked how the coffee interests were represented on the Committee.

Mr. NICOLLS (Nilgiris) said that the Committee must be as representative as possible of the various Associations.

Mr. WADDINGTON (West Coast) asked if it would not be too unwieldy to have all Associations represented. He would like to suggest that the present three members should remain as an Executive Committee and in its deliberations would consult the Honorary Secretaries of Associations.

Mr. NICOLLS agreed with Mr. Waddington. If the Committee had to meet, he said, it would be possible to get three men to meet, it would be impossible to get a large number to do so.

The following Resolution was proposed by Mr. Waddington, seconded by Mr. Nicolls and carried unanimously :—

“That the present Committee continue as executive, and in conjunction with Honorary Secretaries of District Associations arrange the sites of the proposed experimental stations and other details of the re-organisation of the Scientific Department of the U. P. A. S. I.”

The Planting Member's Report.

Mr. J. J. MURPHY (Mundakayam) said: With reference to the Hon'ble Mr. Barber's report I think it my duty as representative of one of the three Associations whose members do not support the Labour Department to ask him to be more explicit regarding the underhand work he alleges has been done against the Department, the malevolence which he says is being shown towards it and the plan of blackguarding an individual which he gives me to understand is in existence. His words appear to me to cast an unfair reflection on all non-subscribers and should be substantiated or withdrawn. I therefore propose that from the Hon'ble Mr. Barber's report there be deleted a portion commencing with the words “Besides this criticism” and ending with the words “the treatment they deserve.” I shall be very much obliged if some delegate will be fair-minded and broad-minded enough to second the Resolution.

Mr C. H. DANVERS (North Mysore) seconded the Resolution.

The Hon'ble Mr. BARBER replying said that he did not think that any one in the room listened with more interest than himself to what Mr. Murphy had to say. Mr. Murphy often nearly convinced him that his point of view was the point of view that ought to be taken. In this particular matter he had had a conversation with Mr. Murphy on the evening that the incident had occurred and he thought he then used the words that it was a “matter of common knowledge.” That was where he made a mistake, because what he hinted at was a matter of general knowledge, and there were many in the room who would support what he had to say in this respect, and who would think that what he said in his Report was in no way unfair. When he was speaking he had no intention whatever of casting reproach at any District Association. He thought it was a fact that not one District Association supported the Labour Department with full membership. He thought it was also the case that there was some support from every District Association. (Mr. Martin: except South Travancore). When Mr. Murphy told him that he intended questioning the statement, he (Mr. Barber) had made, on thinking it over he thought that it was just possible that what he did say might be made applicable to one or more

District Associations. Only members who had been present at their meetings could say if this was the case or not. He had read the reports of every District Association Meeting and he had found nothing that he could take exception to under the words that he had used on Monday. There was no indication in the proceedings, as far as he could see, that anything underhand had been done. There might have been unfair criticism and even libellous, but it could not be called underhand, because the fact that they had been published removed that stigma. The only Meeting that he had attended since his return had been the Nilgiri Association, of which Mr. Nicolls was Chairman, who would bear him out when he said that the Meetings were open to the Press and that nothing of the kind had occurred at those Meetings. That did not mean that it did not exist on the Nilgiris, starting with vague insinuations. He was told that he gave no instances that would give an idea of what he meant. There was one instance however that he could give without a breach of confidence, and this was a matter on which he laid stress, because all these things started in a confidential manner. A certain enquiry, which affected the Labour Department was referred to an official of the District concerned. He happened to meet the official and asked him what view he took on the point in question. The answer was surprising; it was that the Labour Department was only started to give a few officials a good salary. It was never intended to last more than five years. The official said he could not disclose where he got his information from, but it was confidential. He said that he was indebted to his informant for the trouble he had taken in giving him that information. That information would in probability have gone up to Government, and he (Mr. Barber) was lucky to be just in time to give the official more reliable information. Now, he would ask, if in view of this one instance alone, he was wrong in making the statement that he did on Monday. Was this a case of unfair criticism or worse. Other instances had occurred to men in the room and were it not for this veil of confidence they would bear him out. He had appealed to have this veil of confidence lifted; he wanted it done at that Meeting. He owed the Meeting an apology for speaking about a matter of hearsay, but no such apology would be necessary if his appeal was complied with. The trouble about the whole affair was that everything in the way of unfair criticism was hearsay. The information had come from what a man believed to be a reliable source, but he could disclose neither the information nor the source. He would however, say to any individual who thought that the remarks applied to him that he was prepared and quite willing to tender him an apology in open Meeting here next year, or in print if he preferred it, if he would prove to the satisfaction of the Meeting that the remarks he had made were not applicable to that individual. (Cheers).

Mr MURPHY.—I do not consider the Hon'ble Mr. Barber's reply satisfactory, but thank him for apologising for having spoken of what he only knows by hearsay. I did not intend to take up the time of the Meeting any further as it is evident that the delegates do not support me. I emphatically deny that any underhand work is being done in Mundakayam or that there is in my district a plan of blackguarding an individual. I do not think that the Hon'ble Mr Barber's words are calculated to promote the unity he and our other leaders claim, as I understood yesterday, to have so much at heart. His remarks are, on the contrary likely to create hostility against the Labour Department.

[COMMITTEE].

Mr. NICOLLS (Nilgiris) said that he could confirm a great deal of what Mr. Barber had said. He had been Honorary Secretary and Chairman of the Nilgiri Association at different times and since the commencement of the discussion on labour leading up to the formation of the Department, he had always at all their Meetings had Press Representatives in the room, and at all the discussions he had asked those members who were present and were against the department to give their opinions freely at these Meetings. He was rather frightened that he might say something that would incriminate himself. He quite recognised what a capable person Mr. Murphy was and how he let few words escape him. He personally had no intention of getting up a combat with Mr. Murphy as he particularly admired the way in which he dealt with his subjects, and the gentlemanly way in which he expressed his opinion (Cheers). At the same time as he moved about the district, wherever he went, he heard the still small voice whispering things antagonistic to the Labour Department. It was impossible to get specific instances of such cases. They get round in an underhand sort of way very much in the way Mr. Barber had described. "I have heard this," "I have heard that," "Can you explain this or give a reason for that?" His answer was that he was not prepared to discuss the matter in private. If the men asking these questions would come to the Meeting and ask their questions and air their grievances in public, he felt that if anybody had anything to say against any individual or against the Department, he ought to express that opinion so that it could be heard, and not hide behind corners and talk about it. That could do no good and only made for discontent and not the unity that the Chairman had asked for in this Association. He was afraid that he had been able to add very little to what Mr. Barber had told them, but that was not his idea. His idea was to tell the Meeting that he knew this sort of thing was going on. He implicated no Association and no one present. He did not think it was necessary to do so. All he desired to say was that he agreed with everything Mr. Barber had said was going on and the sooner it was stopped, the less likelihood there was of drawing friends apart or dissolving the unity that was the strength of their Association (Cheers).

The Hon'ble Mr. BARBER said that he would like to say a word or two about the last few words that had fallen from Mr. Murphy in his reply. First in regard to creating hostility, he did not think that he could be accused of taking a hand in creating what already existed. He would also like to ask Mr. Murphy what reason he had for assuming beforehand that the feeling of the Meeting would be against him.

Mr. MURPHY.—When I spoke before I did not know that any other delegate was going to speak. I can only say that I assume that the feeling of the Meeting will be against me because I saw plainly when I asked somebody to second the Resolution that there was considerable delay till Mr. Danvers very kindly came forward to do so. I only wish to add that if as Mr. Nicolls believes, this plan of blackguarding an individual is in existence the best way to stop it will be to tell the Meeting the name of the district responsible for it. If any one can prove that the plan comes from Mundakayam I can assure the Meeting that I will do my best to stop it. Having made my protest I now ask permission to withdraw my Resolution.

The Resolution was accordingly withdrawn.

FERTILISERS.

The next item on the Agenda was the question of Fertilisers.

Mr. ANSTEAD (the Scientific Officer of the Association) read the following paper:—

At the last Annual Meeting of this Association which I had the pleasure of attending, in 1913, a Resolution was passed asking the suppliers to guarantee that fish manure should not contain more than 5 per cent. of insoluble matter.

The replies received from the firms were of an unsatisfactory nature and most of them said that what was asked for was impossible. Fish manure was prepared in such a way on the coast that it became impregnated with sand and any measures adopted to avoid this would raise its cost price considerably and so on. That no great improvement has taken place since that Meeting is probable since the only sample I have had in my laboratory since my return contained 31.78 per cent. of insoluble matter and only 4.61 of nitrogen. That it is impossible to prepare purer fish manures at a very little enhancement in price, I am not convinced and I hope at this Meeting to hear Messrs. Parry & Co's. representative and the representatives of other firms on the subject.

I have had some correspondence on the subject placed in my hands in which it was stated by a supplier that he could not understand that it made much difference to the planter how much sand was present in the fish so long as he paid a fair price for the nitrogen and phosphoric acid, and there was a tendency to imply that the Planting Expert was making an unnecessary fuss about the matter.

That it does matter and exactly how much it matters I will try and show you. Were this argument true no one would buy nitrogen in the form of fish at all, but always in the form of concentrated mineral fertilisers. Organic manures are bought, not solely on account of their nitrogen content but because they consist of a large bulk of organic matter which, as it gradually decomposes under the influence of bacteria, supplies nitrogen and phosphoric acid to the crop. This organic matter has a decided value of its own, adding humus to the soil, and improving its physical condition as well as supplying food for the soil bacteria which recent researches have shown to be so valuable to the welfare of the crop. Consequently when a manure like fish is bought, organic matter is wanted and not sand, organic matter which is a potential supplier of nitrogen and other plant food. Now it is obvious that the more sand a given sample of fish manure contains the less organic matter it will contain, however rich in nitrogen that organic matter may be. It is for this reason that when an analyst gives you an analysis of fish manure one of the items he returns is "organic matter," and in considering the value of any sample of organic manure as judged from its analysis this is a figure to be looked at.

In the case of fish manure it is largely a question of cost of transport. When this is small, near the coast and near the railway, no doubt it pays to buy low-grade fish as a fertiliser. Indeed, it has been found by the Madras Agricultural Department that this is so in the case of the ryot. But when estates are situated far from the source of supply and the cost of transport is Rs 15 to 20 per ton, as is often the case with many planters, the question is of a different nature.

When the cost of transport is Rs. 11-10-6, per ton, it amounts to one pie per lb. and this is a low figure for the average estate at the top of the ghauts. In the case of the sample of fish manure quoted before which contained 32 per cent. of sand, in every ton there was 717 lbs. of this useless material, and this cost at the above rate Rs. 3-11-9 to transport to the estate. This might have been spent in carrying more profitable material.

The practical conclusion I have reached is that in the case of fish it pays the planters as a general rule to buy fish guano at a higher price rather than ordinary fish manure so long as no guarantee of sand content is given.

Fish Guano can be obtained at Rs. 95 per ton, guaranteed to contain 8 per cent. of nitrogen and 9 per cent. of phosphoric acid and it often contains more than this. Now suppose for the sake of example one has Rs. 1,000 to spend, cost of transport being Rs. 15 per ton; we get the following comparative figures:—

Manure purchased	...	...	Fish Guano. N—8 $\frac{1}{2}$ % P ₂ O ₅ —9 $\frac{1}{2}$ % Rs. 95 per ton.	Fish Manure. N—4 $\frac{6}{10}$ % P ₂ O ₅ —6 $\frac{3}{10}$ % Rs. 50 per ton.
Quantity purchased @	...	...	9 tons.	15 tons. 6 cwts.
Costing	...	...	Rs. 855	Rs. 765-0-0
Cost of Transport @ Rs. 15 per ton	...	...	" 135	" 229-8-0
Total cost on Estate	...	...	" 990	" 994-8-0
Plant food purchased—				
Nitrogen	...	...	1,611 lbs.	1,575 lbs.
Phosphoric Acid	...	...	1,818 "	2,160 "
Value of excess of Nitrogen @ annas 8 per lb.	...	...	Rs. 18	...
Value of excess Phosphoric Acid @ 8 pies per lb.	...	...	...	Rs 14-4-0
Gain in favour of Fish Guano	...	...	Rs. 8-4-0	...

This gain is increased as the cost of transport increases and though it may seem a small amount, being in the neighbourhood of 1 per cent. it is worth saving.

Ground-nut poonac is usually considered to be the cheapest form of organic nitrogen. An average sample of this poonac should contain 8 per cent. of Nitrogen, but this year I have had a number of samples through my hands which contained only 5 per cent. of nitrogen and in some cases even less. My friend and colleague Mr. Harrison suggested to me that this might be due to the presence in them of an undue amount of husk, due either to bad decortication or to their preparation by an expeller method. I therefore determined the amount of crude fibre in a number of these samples with a low Nitrogen content.

A sample of ground-nuts purchased in the bazaar gave the following distribution of husk and kernels:—husks 24.7 per cent., kernels 75.3 per cent. The kernels are covered with a thin brown skin containing

fibre but this amounts to very little. Now the amount of fibre and nitrogen in the husk and kernels is very different and the following figures were obtained:—

				Husk	Kernels
Crude Fibre	...	...	...	56.88	2.31
Nitrogen	...	...	...	1.68	5.32

Moreover the kernels contain some 50 per cent. of oil, while the husks contain none. It is obvious therefore that after the oil has been extracted from the nuts the amount of husk left in the residual poonac must have a large controlling influence on the nitrogen content of the residual poonac.

That this is so is shown by the following series of analyses. The first two show the relation of crude fibre to nitrogen in samples of the best decorticated ground-nut poonac, kindly supplied me by Messrs. Parry & Co.; the others show the relation in poonacs less carefully prepared. I have not yet been able to obtain any genuine samples of poonac prepared by expeller methods to act as comparisons, but these first two samples will serve for the present as standards of what a good ground-nut poonac should be. I hope to do some more work on this subject when more samples can be obtained and the results will be published in due course.

No.				Crude Fibre.	Nitrogen.
133	Crushed Decorticated Poonac	...	...	2.07	2.98
	Uncrushed Decorticated Cake	...	...	2.93	8.26
125	Chuck-made Poonac	...	...	2.41	8.12
125	Machine-made Poonac	...	...	16.46	6.86
138	Poonac	...	...	14.06	6.30
137	Poonac	...	...	16.70	6.30
135	Poonac	...	...	36.60	5.46

It will be seen that these poonacs with low nitrogen content all contain a high percentage of fibre while those with a normal nitrogen content in the neighbourhood of 8 per cent. contain only about 2 per cent. of fibre.

The fact that a number of low-grade samples are on the market points to careless decortication methods and I would ask firms to pay more attention to this point.

The practical moral for the Planter is to always buy his ground-nut poonac on a guarantee, and to have this guarantee checked, and arrange the price paid on the result of this checking analysis. It will

be obvious that the difference in price between a poonac containing 8 per cent. of nitrogen and one containing 5.46 per cent. should be considerable.

The War has reduced our plantations to the verge of potash starvation. Germany have almost a monopoly of the supply of potash fertilisers which are obtained from the huge deposits at Stassfurt. The Board of Trade state that the sales of the German Potash Syndicate in 1914 amounted to 74 million pounds sterling, and in 1913 to 96 millions. Few other deposits of potash exist, though America has hopes in the Searles Lake deposits in California, while recently deposits of potassium carbonate have been discovered in Spain near Coldinga. Whether, when the War is over, we shall be in a position of independence of Germany for our potash remains to be seen, but it is to be hoped that the Stassfurt mines will be seized as part of the indemnity she will have to pay, so that there can be no question again of a German monopoly.

In the meanwhile it behoves us to consider what we can do to tide over the present period of shortage and I have a few suggestions to make which I hope will lead to a discussion on this important subject.

In the first place it must be remembered that in India we have a fairly large supply of saltpetre and under some circumstances this is suitable as a fertiliser. But when this salt is used it must not be forgotten that the nitrate portion of it is a quick-acting stimulating fertiliser, and it must not be applied before seasons of heavy rain or there is a danger of the nitrate being washed out of the soil and lost in the drainage water. For these reasons saltpetre is not always a suitable fertiliser on the estates and it must always be used with caution.

It is possible, however, to use saltpetre as a base of a low-grade potash fertiliser, by removing the nitrate with sulphuric acid and making nitric acid. The residue after this treatment consists of an acid sulphate of potash, and if lime is mixed with this to neutralise it, we get a double sulphate of calcium and potassium which can be used as a fertiliser while the nitric acid has a considerable commercial value.

On my return from England last October, I had the pleasure of discussing this process with Mr. Bernard, Messrs. Parry & Co.'s Chemist, with the result that it has been carried out on a small scale at their works at Ranipet and a potassic fertiliser was obtained which contained 11.76 per cent. calcium oxide and 22 per cent. potash. The cost of this is about Rs. 100 per ton, making potash cost 3 annas 3 pies per lb. as compared with 2 annas 2 pies a lb. in sulphate of potash before the War. I have, however, little doubt that if this salt were manufactured on a larger scale and there be a demand for it, its price could be reduced.

Planters who have in the past manured their estates highly and used potash consistently can no doubt do without this element for a year or so, by bringing into availability the unused residues in the soil by means of frequent cultivation. This especially applies to tea estates. Again some of our soils have fairly large reserves of potash in them in an insoluble or slowly soluble form and these reserves can be made available to the plant by cultivation and the application of lime, and I am of the opinion that one of the best and most practical things we can do is to spend the money which would normally have been spent on

potash on giving our soils heavy dressings of slaked lime. For coffee, applications should be made at the rate of one to two tons per acre of slaked lime, while on tea estates five and six hundredweights up to a ton per acre may be applied with advantage, depending on the type of soil. Rubber soils too would undoubtedly benefit by applications of a ton an acre. I am quite aware that there are difficulties in the way of this procedure, shortage of lime supplies for one thing, of transport for another, and labour and prices are also factors, but where it can be done I feel assured that it will be a good plan. When the potash supplies again become available the reserves which have thus been drawn upon must be replaced by increased application of potash fertilisers.

In Mundakayam recently a trial has been made of burning shell on the estate instead of buying burnt lime and this will undoubtedly pay, but it must be remembered that good and thorough burning is essential. In one trial for instance the lime after burning and slacking contained 29 per cent. of calcium carbonate—unburned material. This point needs watching, and the final product should not contain more than one or two per cent. of carbonate. I think it must pay in cases where the raw material can be obtained cheaply and easily to build a proper kiln of stone and go in for lime burning on a somewhat large scale. Once more I would whisper co-operation knowing, however, it is one of the things *tabu* among South Indian Planters.

Another method of getting over the difficulty is to grow green manures. Many green manuring plants are deep rooted and draw potash from the lower levels of the soil, and when subsequently cut and dug in, supply it in an available form where the roots of the crop can reach it. On tea and rubber estates and in young clearings in coffee this is to be strongly recommended.

That green dressings do supply valuable quantities of potash is well known. To mention only a few—

Indigofera tinctoria	contains	13.4	%	Potash in its ash.
Tephrosia tinctoria	"	16.4	%	"
Cassia hirsuta	"	1	%	" in the sun-dried plant.
Sesbanias	"	3	%	" in the dry state.
	"	25	%	" in the ash.
Sophora glauca	"	24	%	"
Tephrosia purpurea	"	24	%	"
Crotalaria striata	"	35.5	%	"

These are all well-known green dressing plants easily grown on our estates.

Finally use may be made of wood ashes. These are a valuable form of potassic fertiliser and the amount of potash they contain depends a great deal on the materials from which they are made. On large estates arrangements might be made to collect the ashes from the cooly lines which would yield a considerable supply of potash annually. Care should be taken to collect them in a fairly pure state and to store them in a dry place; the potash in ashes consists chiefly of carbonate and is very soluble, so that if rain falls on the ashes before they are applied to the soil a large portion of the potash in them is lost.

Another source of ashes in some places might be lantana and general scrub jungle on waste land. Lantana gives very little ash, but that ash contains a very high percentage of potash, 12 per cent. The ash from boiler flues and chimneys is said to contain 10 per cent. of potash, while ash prepared from saw-dust and waste wood also contains a considerable amount of potash.

How far such sources of supply of ashes from waste land, waste wood products in forest areas, saw-dust from the West Coast saw-pits and mills, boiler and furnace ash from factories, ashes from villages, and lines, cocoanut waste, etc., may be available in a practical way, I am unable to say definitely, but at the present time all such sources are worth looking after and wherever individual planters find them easily available it will undoubtedly prove profitable to make use of them.

A sample of wood ashes submitted to me from an estate in Coorg last March proved to contain 42 per cent. of lime, 1·6 per cent. of phosphoric acid and 3·9 per cent. potash and I valued it at Rs 16 per ton. Ashes prepared from bamboo, lantana, etc., will contain more potash than this. The following figures which have been collected from various sources show the percentages of potash in the ash of some common waste products :—

		Percentage of Ash.	Percentage of Potash in the Ash.
Albizza prunings	...	4·4	22·8
Cocoanut husk	...	5·3	47·0
„ shell	...	1·3	26·5
„ leaves	...	10·9	1·1
Fern	...	...	29·0
Erythrina lithosperma...	...	7·3	35·1
Hevea leaves	...	4·4	25·8
„ wood	...	6·0	13·5
Leucaena glauca	...	6·5	25·1
Sophora glauca	...	5·4	24·1
Soft coal	...	...	0·2
Casurina	...	...	4·9
Sisal	...	...	8·0
Mixed Wood Ashes	...	...	2·0

Mr WRIGHT (Messrs. Parry & Co.) said that he did not come to the Meeting prepared to make a statement. Mr. Anstead had raised the question of fish manures and of the firms being asked to give a guarantee of a 5 per cent. maximum amount of sand. On this point he would like to say a few words. The trouble was caused by the fact that Ceylon was prepared to take fish in any quantity and quality that they could get. Last year he rejected supplies of fish containing 60 per cent. of sand; the same fish was shipped to Ceylon. He might say here that it is practically impossible for his firm to guarantee a maximum of 5 per cent. He did not think that it was impossible to improve the present condition of things, because they might buy their fish direct from the boatmen and dry it themselves, but to do so they would want such

an enormous area for drying grounds, that it would be difficult to get. They did dry a certain amount of fish themselves, mixing it with the best quality they bought in the market, they were able to put a milled fish on the market that was considerably better than anything else there at present.

As regards fish guano, he would like to say that he had always advocated fish guano being used instead of fish manure. There he would endorse everything Mr. Anstead had said except his estimate of the price. He did not think that they would be able to buy fish guano at Rs. 95 per ton. At the present moment the price for fish guano with freight and other charges was about Rs. 150 a ton. It would be higher still if Ceylon was prepared to pay Rs. 200 per ton.

As regards what Mr. Anstead said about guarantees, he was prepared to say that Messrs. Parry & Co. always guaranteed a nitrogen content of from 7 to 8 per cent. and it was perfectly easy to distinguish between the two ground-nut poonacs, namely, that which was mixed with the fibre and which was not. In conclusion he gave a brief description of some experiments that had been made by his firm for producing a sulphate of potash fertiliser since the import of that chemical from Stassfurt in Germany had been entirely stopped by the War.

Mr. C. H. BROWNE (North Mysore).—What is the present price of fish manure; has it been increased in the same way as fish guano?

Mr. WRIGHT said that at the present moment there were no supplies of fish available. He had bought fish in Malabar at Rs. 28 per ton and he had bought the same fish at Rs. 70 per ton. That would give an idea as to how the price varied.

Mr. BROWNE.—I only asked the question to show that Mr. Anstead's computation was based on fish guano being priced at Rs. 95 per ton. If it was sold at Rs. 150 per ton, the advantage would be on the other side.

Mr. HARRISON (Agricultural Chemist, Coimbatore) said that he was afraid that he could not say much in a general way that could be of value, but he could endorse all that Mr. Anstead had said from his own experience, and his experience extended not only to manures purchased from the firms, but manures purchased in local centres throughout the Presidency, and he had no doubt that there was a serious deterioration in the quality of the manures. What he had to say was pertinent whether the individual decided to purchase a high standard type of manure or one of inferior value. That did not concern him. The planter must figure that out for himself. What he wished to call attention to was that serious sophistication of manures did take place and this was a serious consideration when large purchases of manure were made. Mr. Anstead had first of all referred to the large quantity of sand in fish manures. He had a large number of samples passing through his hands of this manure from different sources, and he could say that with regard to fish guano that it was without exception a product of high purity. Over 75 per cent. of the samples that he had analysed contained less than 3 per cent. of sand and the other 25 averaged less than 7½ per cent. In fact the average amount of sand in all the fish guano that he had analysed was only 2½ per cent. so that fish guano was, as he had said, a product of high value. When, however, he turned to fish manure, a very different tale

was unfolded. Over 50 per cent. of the samples that had passed through his hands were adulterated and grossly so. He had figures that reached as high as 40 per cent. He had a sample the manurial content of which was only $1\frac{1}{2}$ per cent. It was practically valueless for the purpose for which it was sold. He could not mention the source of this so-called manure or the price which was paid for it, but he had no doubt that the ordinary price must have been paid. If this was so, the net cost of the nitrogen content in the stuff must have been enormous. Again about 30 samples of fish manure that he had varied considerably, both as to the quantity of sand and to the nitrogen content, the latter varied from 5 per cent. down to 2.8 per cent. He had no doubt that fish manures, other than prawn skins, should not contain more than 3 per cent. of sand. It did not matter whether it was fish guano or fish manure. But such a very large number of samples did contain such an undue proportion of sand, that it was no wonder that people were beginning to look at the fact as one of fraudulent intention. He had listened to the remarks of the representative of one firm with interest when he said that the sample of fish manure purchased with avidity in Ceylon contained 60 per cent. of sand. If that was so he did not admire the Ceylon planter's taste, but when he was on the West Coast a short time ago one of the explanations given for the fact that there was so much sand found in ordinary fish manure was due to the fact that the Ceylon planter refused to take a low-grade of fish manure—a very different explanation altogether. He would certainly be glad to hear something further on this point. Mr. Anstead has also referred to ground-nut poonac. He was on this subject too perfectly in accord with all that Mr. Anstead had said. This low-grade ground-nut was undoubtedly the product of the expeller machine, which contained a large amount of husk, which again induced a larger percentage of oil in the cake, which made the cake inferior in very respect. It was not only in ground-nut cake that he found this sophistication, it occurred in other poonacs, namely, castor, neem and pungum. As regards castor on the whole the nitrogen content remained fairly high, but there was a considerable variation in quality due in most cases to an admixture of unsaleable manurial matter which for present purposes might be called sand. He had samples that contained 5 per cent. of sand, but this sank into insignificance when compared with certain samples which contained from 20 to 25 per cent. In the case of neem poonac too, abnormal samples were met. From whatever point of view they looked at the question there was an undoubted tendency for these manures to depreciate, and it called for the consideration of the planter making large purchases.

Dr. LESLIE COLEMAN (Director of Agriculture, Mysore) speaking with regard to the poonac turned out by the expeller machine, said that he had one such machine in Bangalore, and during the past year he had made a considerable number of analyses of the various poonacs turned out by this machine, and he invariably found that the ground-nut poonac was lacking in nitrogen. He understood that the reason for this was that this expeller machinery could not handle the nuts if shelled, it must have the shells to expel the oil properly. That would of course account for the fibre in the cake.

Mr. MENON (Assistant from the Madras Fisheries Department) said that the presence of the shell produced a better quality of oil.

Mr. HARRISON.—In this particular instance I take it we are more concerned with the quality of the cake than with the quality of the oil.

Mr. ANSTEAD said that he would like to call attention to a little point that he had purposely left to the end of the discussion. He wished to point out to those who were getting adulterated poonacs, that as far as the analyst was concerned, that it was always possible to find out whether cake was adulterated by using the fibre content to check the analysis. It was perfectly easy for a chemist to put his finger on adulterated cake. It was a point to be remembered both on the side of the supplier and of the planter. If a sample is sent to an analyst he could always tell whether it was adulterated with the greatest of ease.

Mr. LANGLEY (Messrs. Peirce, Leslie & Co.) said that it did not require a chemical analyst to tell whether there was husk in ground-nut poonac, for all the ground-nut poonac that one bought now was produced from the oil-expeller machine which left the husk on. As a matter of fact the analyses given by Mr. Anstead rather erred on the low side, because he was perfectly convinced that all ground-nut poonac which the European manure firms sent out contained well over 7 per cent.

Mr. ANSTEAD said that these particular analyses were of poonac sent by a planter who bought the stuff—he was not at liberty to say where it was bought—on a 7 per cent. guarantee. It was now an admission on the part of Mr. Langley to say that knowing it was bad, they sent it out on a per cent. guarantee.

Mr. MENON (Madras Fisheries Department) then read the following paper on fish oils and manures:—

The uses of Soap as an Insecticide.

Before entering into the subject matter of my paper, let me first thank the Secretary of the U. P. A. S. I. for having given me the opportunity of attending the Annual Meeting of the Association and of meeting the delegates of the various District Planters' Associations and others interested in planting. I would not have been here this morning but for the unavoidable absence of Sir F. A. Nicholson, Honorary Director of Fisheries, which Sir Frederick much regrets. The fact is that I have been for the last few months interesting myself in coffee planting or at least in trying to find out some suitable remedy for combating the coffee pest. My interest in coffee pests originated early last year when I casually visited the Agricultural Department in Bangalore where Dr. Coleman and his Senior Assistant Entomologist were experimenting with various insecticides for destroying coffee bug. They gave me an idea what the pest was like and what was required to combat the same. I set to work in finding out something which would be cheap and at the same time an easy and efficacious insecticide.

Coming to the subject of soap, it may be interesting to note that the Phœnicians who settled in Gaul in 600 B. C. were the real inventors of soap. Soap is said to have been made in almost every country from a very early time, the product being of the crudest description, being made from goat suet and such grease by alkali from wood ashes after treatment with lime. In England, soap making was introduced in the 14th century. A prohibitive tax was imposed upon the manufacturer. A certain company obtained the monopoly for the soap paying annually a tax of £20,000 for 3,000 tons of soap. After a time, the tax was removed and soap-making began to be taken up to a large extent as a

profitable business. But it was in the beginning of the 19th century that soap-making made considerable advance. What with the researches of Sheverul into the constitution of fatty acids and the manufacture of soda from common salt by Leblanc soap is now being made, or at least used in every civilised country, for according to Dr. Liebig, the amount of soap used is the best measure of determining the degree of a people's civilisation. The world's production of soap may be put down at many thousands of tons per week, and every year sees an increase of soap production over the previous one. Though much soap is not made in India, she imports a considerable quantity. The total imports in 1913-14 being valued at Rs. 75,00,000. Our Presidency importing over Rs. 11,00,000 worth.

Soap may be regarded as a salt, the product of the combination of fatty acids with a metallic base. In practice, however, no commercial soaps are made except with soda or potash, as only these soaps are soluble in water. The combination of soda with fatty matter generally produces hard soap, while potash gives soft soaps. Hard soap is used for various purposes, namely, for the household, toilet and industrial needs, while the use of soft soap is limited to some household and industrial requirements. Hard soap is generally used for its cleansing action on the skin. Various theories are put forward to explain the detergent action of soap. Some scientists regard that the effect is due to the fact that the alkaline salts of the fatty acids are decomposed to free alkali and acid salt, which being soluble in water forms with it a strong foam. The alkali carries away the fatty dirty matter from the stuff treated with the soap, and the foam helps to its mechanical removal. Some scientists observe that the detergent action is due to the great power of wetting solutions possessed by soap-water which penetrates the tissues, etc., with greater ease and more thoroughly than with mere water, and thereby helps to dissolve the adhering particles of dirt and remove them. There is no doubt that soap possesses to a high degree disinfecting and deodorising properties. A solution of one part of potash soap in ten thousand parts of water is said to completely prevent the development of anthrax bacillus. It has been known that a certain proportion of disinfectants such as phenols, cresols (carbolic acid) incorporated with the soap adds considerably to its disinfectant and antiseptic properties. Thymol is a very powerful antiseptic and disinfectant and is in this respect eight times as powerful as carbolic acid. The ordinary carbolic medicated soaps contain from two to twenty per cent. of carbolic acid.

It is also well known that soap forms an ingredient of the various preparations used for killing insects that attack plant and animal life. The soap in such mixtures forms only a vehicle or medium for the incorporation of other ingredients which are the active agents in the mixture. For example, in making emulsions with kerosine oil and water the presence of a small percentage of soap is essential to emulsify the oil and water which otherwise will separate as two distinct layers. The kerosine oil is the active agent while soap is only a helper. In the blue bar soap, soda, rosin, combination of spraying mixture for the green bug, soap is as it were a vehicle for the rosin and soda. Of course in certain cases, soap with some free alkali is the actual insecticide, though here also it may be contended that it is a free alkali that attacks and shrivels up the insects, while the solution of soap may help to wet the insect and render the work of the alkali easier. Whether a pure alkali wash *e. g.* solution of soda ash in water would prove efficient on

the scales without attacking the plant is not ascertained. I am led to think that an excess of alkali is injurious both to the insect and the plant (over one lb. of soda ash in four gallons of water will be highly injurious to plant life).

Potash soaps are preferable to hard soaps in so far as the former class of soaps are more easily soluble in water than the latter soaps. Hard soaps like the ordinary household soaps, apart from their cleansing effect on the skin and clothes, have practically no insecticidal qualities, except when they contain some free alkali; but soaps made from marine animal oils (whale oil) and fish oils (like cod liver oil, herring, seal and sardine oils) have distinct insecticidal qualities as have been proved by many entomologists. Whale oil soap in the proportion of one lb. in two to eight gallons of water is an effective insecticide for leaf hoppers, mealy bug, white fly and some scale insects. The sardine oil soaps made at Tanur have similar properties as shown by the experiments of Dr. Coleman, Mr. Frattini and others. The peculiar insecticidal qualities of whale oil and fish oil soaps are to be attributed to the special composition of the fatty acids of these oils which impart a distinct fishy odour to the soap. Whether it is this fishy odour or any special toxic property of the dissociated acid salt of the fatty acid that is injurious to the insect has not been definitely ascertained. Fish oil soaps are very popular with the Agricultural population because, besides being efficient insecticides, they are cheaper than the ordinary hard soaps. A potash soap will be more useful by reason of its greater solubility than soda soaps; but potash is so horribly expensive at £120 per ton, or Rs. 90 per cwt. and even at this price it is not available. Before the War, potash was selling only at about £20 per ton. There is therefore no immediate chance of getting potash at reasonable rates to make soft soap. As I mentioned above, soap is made from almost all kinds of fish oil, the soap that is made at the Government Fishery Station, Tanur, is from the oil of sardines (*clupea longiceps*). The annual catches of sardines on the West Coast according to the calculation of Sir F. A. Nicholson, the Honorary Director of Fisheries are about, at normal times, 100,000 tons and the quantity of oil that could be obtained by heating this quantity will be 10,000 tons or 10 per cent. of the sardine. But for the last two years the oil production has been extraordinarily dull owing to the absence of sardines. We make at Tanur two qualities of soap, one plain fish oil soap, the other with admixture of rosin. Some planters rigidly omit rosin in the soap and substitute saltpetre, while some others use only rosin and no saltpetre. The effect in either case amounts to the same thing. The saltpetre spreads the leaf with a slight sticky film thus glueing, while rosin also acts in a similar fashion. But this may be said of saltpetre that it has some manurial value. In choosing an insecticide for the coffee pest, various considerations have to be taken into account, the character of the insect, its life stage, climate and season of the year, even the elevation of the estate, also strength of solution and mode of application. I was informed by some planters whose estates I recently visited, that climate and elevation of the estate fix as it were the quantity of the soap and the extent of its dilution. In the cool season and at elevations of more than 6,000 feet. the bug is quite resistant to spray fluid, which at lower elevations with warmer climate will be readily destroyed by them. Spraying with a solution of one lb. of fish oil rosin mixture in two gallons of water is very destructive to bugs at elevations from 2,700 to 3,600 feet, while at higher elevations of over 6,000 feet

solutions of stronger concentrations are necessary to get the desired effect. Something has to be said about the mode of using the mixture; some planters adopt spraying and some the brushing methods. The latter procedure seems more thorough and insures complete contact of the mixture with the scales, and would therefore be more effective than spraying which may leave certain portions of the shrubs with the scales, untouched. But spraying is by far cheaper and in large estates with many acres of coffee brushing may be too slow an operation and at the same time expensive. Spraying, though a simple operation will have to be repeated occasionally to remove the last traces of the bug. Another consideration about the mixture to be used is that it should have no injurious effect on the plant life. Some preparations may be capital insecticides but they may also not spare the plant, *e. g.* alkali washes with excess of alkali. A second consideration is that no injurious residues should be left on the plant treated with insecticide, *e. g.*, in treating tea pest, if any of the poisonous matter remains in the leaf, it may be injurious for human consumption. A third consideration is that the insecticide should not injure the containers in which they are kept, *e. g.* free mineral oils affect the rubber, etc. A fourth consideration and not the least is that it should be cheap for use. The fish oil soap mixture combines all the desired qualities for an efficient, quick and non-injurious, cheap, and ready for use as insecticide. This can be used :—

1. 1 lb. in four gallons of water for mildew, barklouse, and such pests attacking tea.
2. 1 lb. in ten gallons of water for mango hoppers and such soft-bodied insects. (Experiments in this direction were done by the Government Entomologist, Coimbatore).
3. 1 lb. in four to eight gallons of water for rose blights and such pests on crotons, etc.
4. One to two gallons of water for coffee bug and such hard scales.

Of course, we could vary our soaps to suit all planters and would be ready to work up to any formulæ or recipe they may desire or find useful, and we could add any special insecticide that might be desirable. Planters can have any soap made according to their own wishes, and not be tied down as at present with European soaps and fixed classes made according to fixed British formulæ and without any special consideration to planters' various needs. What they have to buy now is ordinary European soap to which they have to add their special ingredients. We can supply a soap to any need or demand whatsoever of planters and usually ready for simple mixing with water to be ready for use, and we can supply our fish oil soap cheaper than any other now in the market.

Judicious manuring at the proper seasons of tea and coffee shrubs prevents to a large extent the appearance of blights, which commonly attack unhealthy plants. The potash manures are getting frightfully expensive owing to the war, and the only proper substitutes for these will be the different classes of fish manure. On the West Coast different kinds of fish manure are prepared, chief of these is the guano which is the residue from the fish (sardines) after removing the oil. The annual production of guano on the West Coast at normal times may be put down at 15,000 tons. If the sardines appear in plenty this season, guano will be much available.

The shells of prawns are excellent manure for tea plants and these are also available.

Mr. ANSTEAD pointed out that Mr. Menon was in error in saying that fish manure was a substitute for potash. The amount of potash in fish manure was so small that it could not be used as a substitute for potash. It was a useful fertiliser itself. He also took exception to the statement made by Mr. Menon that saltpetre in a spraying solution damaged the copper of the sprayer.

Mr. WADDINGTON (West Coast) said that he had never come across fish-oil soap until he had visited the Exhibition. It had rather given him a line of attack on pests and diseases if it retained its smell.

Dr. COLEMAN.—Yes it does.

Mr. WADDINGTON continued that fish oil was being used for green bug, but he wanted to go for bigger game. Their great pest on the West Coast was the porcupine, which had a keen sense of smell.

When he got to the Exhibition and smelt that bar of soap it struck him that if he applied it to the rubber trees no self-respecting porcupine would come near it. If he could take some away with him—or rather have it sent on in advance—he would like to try it for this purpose.

Mr. ANSTEAD said it would be worth trying. He asked if Mr. Waddington had ever used a decoction of lime and sulphur.

Dr. COLEMAN (Director of Agriculture, Mysore) after thanking the Chairman for the honour of permitting him to be present, said that after hearing Mr. Menon speak he was forced to abandon the preliminaries of his speech and commence in the middle of what he had intended saying. He must confess first that he was not prepared to endorse all that Mr. Menon claimed for fish oil-soap as an insecticide. He looked on it as a cheaper substitute for the soap which they had been previously using and on that ground he suggested its manufacture to the Fisheries Department. With the old soap resin mixture there were two disadvantages, one was the price and the other was the fact that the planter had to make his spraying mixture himself. In the case of the mixture supplied by the Fisheries Department as all the mixing, etc., had been done beforehand all that the planter had to do was to add the necessary quantity of water. Apparently, however, as Mr. Menon had pointed out green bug under different conditions varied in its susceptibility to the treatment. This meant, of course, that the spraying solution would have to vary in strength; so that each planter must work out for himself under his own local conditions the strength required to make the spray effective. In addition to this decided advantage the mixture was much cheaper than the mixture that the planter used to make for himself. He did not agree with Mr. Menon when he said that fish oil was a fungicide. It was not likely to prove at all effective in combating the fungus diseases of plants.

He congratulated the United Planters' Association on the prospect of having in the near future a properly organised Scientific Department with an adequate staff and proper experimental stations. When he arrived in Mysore some years ago, he recognised that one of the main difficulties in the way of prosecuting work in connection with the plan-

ting industry was the lack of experimental stations. He had always doubted the feasibility of carrying on extensive experimental work on private estates, because in the first place the Manager was not left with a free hand, and in the second the object of the planter must be to show a profit. On the other hand, in work of an experimental character, profit was the last thing to be considered.

The CHAIRMAN.—We, at any rate, will be saved from that.

Dr. COLEMAN continuing said that they had also been saved from it in Mysore. He trusted that they would not require it from their Scientific Department, that they would not require the Department in the balance sheet to show a handsome profit. If the staff of their Scientific Department expended their energy in attempting to make profits they would certainly not be using their energy in the right way. Every ounce of energy used in attempting to make profits was so much energy taken away from investigation.

He had come there really not so much to give as to obtain information. It was very evident in agricultural matters in India that situated as scientific enquirers were with very small staffs who were able to tour for a very limited time, that they must be something more than human if they could gather together in the course of a year or two the information regarding pests and diseases that the planters had not been able to gather in the last thirty or forty years. He believed that he was expected to say something about borer. He had not the slightest doubt that most coffee planters of the present knew much more about borer than he did, so how they could expect him to tell them something about borer passed his comprehension. What he did think however was that now that they were about to have a proper Scientific Department they ought to realise that there should be the most perfect co-operation between the planters and the Scientific Staff if the desired results were to be obtained. They must not expect the Scientific Staff to do everything; they must be prepared to furnish all the information they had been able to collect. It was quite possible this information would not be very reliable from a scientific standpoint, but it would be valuable as it would give the Scientist a point from which to start. He had no doubt if he had been able thus to collect all the information that they had about pests he would be in a better position to go ahead and he might have done in six months what had now taken him two years to do. He hoped that they would utilise more and more their own special paper, the *Planters' Chronicle*, to put forward the information they had collected with regard to pests and diseases and even though they had their own Scientific Staff, he would feel obliged if they would send him information also. He wanted them to realise that he was entirely in sympathy with the work that was to be done by their Scientific Department and at the same time would impress upon them that to obtain practical results in scientific investigations required time. Scientific workers on agricultural problems must of necessity get into touch with the man in the field if the best results were to be obtained.

Dr. COLEMAN then said he would like to discuss two or three questions which had come under investigation by the Mysore Department of agriculture and in the first place wished to make some remarks with regard to green bug. This pest had spread very widely during the past year so that now there remained only a small portion of the coffee area in Mysore uninfected. Although the investigations had shown that the area infested had increased considerably the actual damage that had

been done was much less severe than last year. This was due he thought to the peculiar climatic conditions that had prevailed, there having been rain in practically every month throughout the year. He would like to be able to tell them that green bug would not bother them any more, but he was very much afraid that he could not conscientiously do so as in all probability with a return to more normal weather conditions there would be an increase in the severity of green bug attack. The chief natural controlling agencies of this pest were two fungi. These were the so-called white fungus and the black fungus. The white fungus apparently required a very high degree of moisture for its development and as far as he had been able to ascertain developed chiefly during the monsoon. On the other hand, the so-called black fungus had this year developed as early as February and had played by far the most important role in the control of green bug. This so-called "Black Fungus" was closely related to a fungus which they might remember to have seen as boys. During the Autumn at Home they frequently found house flies attached to the window panes by a sort of halo. These flies had been killed by a fungus very closely allied to that which attacked the green bug. Both these fungi had a peculiar method of spreading. It developed inside the insect and when it broke out there appeared on the surface of the insect short stalks each of which produced a spore at the end. These stalks swelled at the end immediately below the spore and finally burst, throwing the spores off and thus spreading them. Thus this fungus had a means of dispersing its spores quite apart from the outside agencies of wind, rain, etc., and had therefore an advantage over the white fungus which was entirely dependent upon outside agency for the dispersal of its spores. It could thus be seen that the black fungus was much more likely to play a role in the control of green bug during comparatively dry seasons of the year than was the white fungus. If the black fungus developed in future more extensively in the dry season they would have a most important controlling factor in dealing with the green bug. The unfortunate thing was whereas the white fungus could be readily cultivated artificially, the black fungus had resisted every attempt at artificial culture. Some might ask what was the use of making these cultures; could they not trust to the natural agency for the spread of the fungi. That however would be leaving the work of dispersal purely to chance. If they could cultivate these fungi and send planters the spores in a bottle they might apply them just where they were wanted.

Last year he had spoken about certain parasites and predaceous insects which he had then had some hopes of utilising more freely in controlling green bug. Unfortunately the prospect was not very bright owing to the fact that the parasites were in their turn attacked by secondary or hyperparasites which kept down their numbers. Thus the primary parasites were not likely to have much effect especially considering the enormous productivity of the green bug.

He also wished to say a word or two with regard to ants and their relation to green bug. With regard to the relation of ants to green bug there was still a need for much investigation. It was usually supposed by planters that ants played a prominent role in the spreading of green bug, but no definite information was available on the subject. Experiments conducted by the Mysore Department had shown that certain species of ants do carry green bug from one coffee bush to another, and in the case of some species of ants which make their nests in the ground they had been found to carry green bug into these nests. In the case of the tree ants some of which such as the big red

ant (*Occophylla smaragdina*) had been found to carry green bug ; the destruction of these nests was a comparatively simple matter and the destruction of these nests was a regular practice on many estates. In the case of ground ants the question of combating them was a much more difficult one to solve. In a recent publication of the Java Department a simple and ingenious trap had been described for catching these ground ants which was reported to be quite effective, and it would be well worth while to test its efficiency in India also.

Up to the present these ants had been looked upon as an unmixed evil but there was quite a possibility that they are serving a useful purpose in connection with green bug control.

They knew that bees carried pollen from one flower to another and so aided in cross-fertilisation. It was possible that in a similar manner ants carried fungus spores from one infected with green bug to a healthy one, and thus aided in the dispersal of the fungus. This matter would have to be investigated. The ants coming from trees bearing green bug attacked by the fungus would have to be examined under a microscope to see if they carried about with them the fungus spores. These facts indicated how difficult and many sided these investigations really were. They were not dealing with chemical components the component parts of which were well known and which acted and re-acted on each other according to known definite laws. They were dealing with living things the laws governing whose actions remained still in obscurity. That was all he had intended to say with regard to green bug except certain facts as regards its life history. Most planters had wondered at the rapidity of the spread of green bug. He had heard of patches of coffee being visited a few months previous without revealing a sign of green bug; on being examined again the coffee was found to be plastered as it were with the pest. They would cease to wonder if they knew the rate at which the green bug reproduced. A green bug under favourable conditions produced about 150 young in a month and a half and each of these would produce as many in the same time, so that it did not require a very abstruse mathematical calculation to show that from one green bug very nearly four million would be produced in three months. The view that green bug was not a serious pest and was not making a serious drain on the coffee tree must be taken with the proverbial grain of salt. It must be remembered that they were feeding on the tree and taking away the nourishment which ought to develop the tree and the crop.

There were two other subjects, about which he would like to make a few remarks. One was that of coffee borer which apparently had been much in evidence recently. Unfortunately it was a subject on which he could give them very little information. The Department had been working on the subject for eight months, but during that time they had been able to learn little. They knew that coffee-borer was one of the oldest of the coffee pests so he presumed that it had been on the coffee ever since it had been introduced into India. It was probable that the insect was native to India, so that it must have been on some trees before coffee had been introduced yet he had not been able to obtain proof that the borer had ever been found on any tree other than coffee.

MR. WADDINGTON.—What about the bamboo?

Dr. COLEMAN said that he had yet to get indisputable evidence that the bamboo harboured the coffee-borer. The evidence he required was a bamboo cut open with the adult insect inside and that insect must be the coffee-borer. To prove the difficulty of distinguishing the coffee-borer from other related beetles he circulated a couple of specimen boxes in which there were a number of beetles and asked experienced planters to examine them and decide which was the coffee-borer. The only assistance he would give them was that he could assure them that the coffee-borer was present in the collection. All these beetles had been found in the jungles and on coffee estates. It was impossible for the Agricultural Department to investigate thoroughly the question of the host plants of coffee-borer. This was a direction in which he must ask planters to assist him as far as they could by sending him specimens of adult borer beetles taken from different trees on their estates. The pest was causing serious loss every year and the problem of combating it would warrant the devotion of a certain amount of time on the part of planters to assist their Scientific Officers in working it out. If they examined the literature on the subject they would find that there were supposed to be two chief periods in the year when the adult beetle could be found. One was in September-October and the other was in April or May. It was on that supposition that he started work this year and prepared an extensive series of experiments. Unfortunately the beetle did not appear in April or May and he could only get a single specimen. This may have been due to climatic conditions peculiar to the year, or it might be due to the fact that the beetle does not normally come out in large numbers in April or May. It was important to settle this point because it was only possible to combat the pest directly in the adult stage, or at least before it got inside the tree. Combative measures must be taken at the time of the beetle's emergence, so it was essential to have accurate information as to when they do emerge. These were facts the planters must help him to ascertain and he would be much obliged if planters would send him specimens of the borer beetle at the time it emerged.

There was just one other subject that he would like to refer to and that was a disease caused by a fungus—Black Rot of Coffee. He started work on black rot three or four years ago in a more or less desultory fashion, but the Department had been able to take up the subject in a serious manner only during the previous year. Before starting work he had been told by planters that black rot lived in the soil and travelled upwards from the stem of the tree. The result of investigations had shown that this was not so. The investigations had further revealed that the previous descriptions of the fungus causing the disease were in many essential respects wrong and that whereas it had been looked upon as a more or less unique species it really was very closely related to a large number of fungi already quite well known. Its name would as a result have to be changed from *Pellicularia Koleroga*, a name by which it has been known for about forty years, to *Hypochnus koleroga*. The real spores of the fungus had been discovered for the first time and the method of their spread ascertained. There remained still to work out how the fungus persists through the dry weather.

Experiments had shown that the disease could be effectively controlled by spraying, and extensive spraying experiments were being conducted this year by the Agricultural Department and by Mr. Frattini to complete the information necessary before definite recommendations could be made.

The point that planters were interested in was whether the comparative measures were going to pay or not. That would depend entirely upon what the loss from black rot was. He had yet to meet the planter who could tell him the actual sum which he lost each year from black rot. The scientist could tell the planter what the experiment was going to cost. It was for the planter to ascertain whether the scheme was feasible or not under his local conditions. He thought himself that green bug in some ways had not been an unmixed evil on coffee estates, because it had made the planters realise that spraying was feasible. When he came here eight years ago and talked about spraying coffee estates every planter had looked upon him as a hare-brained idiot. His own opinion was that spraying would be profitable in many cases not only against black rot but also against leaf disease.

He had shown that they were just at the beginning of things with regard to coffee diseases and pest. When he came to Bangalore eight years ago, he had practically no staff to deal with plant diseases and insect pests; the Agricultural Department was not organised. In 1914, the Department was finally organised and it was now able to tackle things that it had not been able to do before. He trusted that there would be a continuance of real and cordial co-operation between their Scientific Department and the Mysore Agricultural Department, and that this would lead to much more important results than had been obtained in the past.

The CHAIRMAN said that Dr. Coleman's most interesting lecture had opened up a very wide area for discussion. If Dr. Coleman could spare the time to come back in the afternoon, they would be able to deal with the matter more fully than in the very limited time they had at their disposal then.

Mr. C. DANVERS (North Mysore) said that before they parted for the time being he would like to propose a hearty vote of thanks to Dr. Coleman for the very interesting lecture he had delivered. A planter was described as one who seldom had an opportunity of expressing his gratitude, he would like therefore to take the opportunity of expressing the very considerable feeling of gratitude they all felt to Dr. Coleman for the valuable assistance and kindly co-operation he had extended to their Scientific Department.

Dr. COLEMAN.—Might I say that the co-operation has been on both sides.

Mr. P. G. TIPPING (Coorg) associated himself with all that Mr. Danvers had to say.

Mr. GUY TURNER (Shevaroy) thoroughly endorsed all that had already been said.

Mr. R. D. ANSTEAD said as Scientific Officer that he would like to take the opportunity of expressing his thanks to Dr. Coleman for the specially kindly attitude his Department had adopted toward the Planters' Scientific Department. They had heard Dr. Coleman say that he considered himself as one of them. Departmentally and personally he would take the opportunity of expressing his thanks to Dr. Coleman for many a personal kindness and many a valuable suggestion.

The Meeting then adjourned till 2-30 P.M.

Third day, Wednesday, 18th August, 1915.

AFTERNOON SESSIONS.

The delegates met again at 2-30 P.M.

The CHAIRMAN before proceeding to the business of the afternoon, read a letter that he had received from the Dewan regarding an interview with the Mysore planters.

Dr. COLEMAN said that it had been suggested that he should send round a series of questions regarding the various projects that he was working on. He was diffident about doing this as he had an unfortunate experience the only time he tried it. In England and other western countries it was a plan that was very extensively made use of; but when he prepared a circular letter of this kind and sent it round in Mysore about 75 per cent. of those to whom it was addressed did not reply. Of the 25 per cent. who did reply a very few gave answers that were of any value whatever. He would ask them frankly whether if he sent round a series of questions regarding any problem would he be likely to get the information. He did not want to waste his time or theirs.

Mr. A. S. DANDISON (Nilgiris).—You will get answers from those who are interested.

Mr. ANSTEAD said that it was probable that he would get replies from 30 per cent. of those addressed. Planters did not answer letters or post-cards. If they were sent through the Secretary they might get more replies possibly after the remarks made at this Meeting and the discussion which had taken place.

Mr. BROWNE (North Mysore) hoped that Dr. Coleman would give the plan another trial. He thought that it would be found that a certain proportion would reply. He trusted that Dr. Coleman would give them an opportunity of showing what they could do.

Mr. C. DANVERS (North Mysore) asked Dr. Coleman if he knew what the ants were going to do with the green bug which they put in their cells.

Dr. COLEMAN replied that he wished he knew. It looked as if the ants were protecting the bugs.

Mr. DANVERS.—If they were going to keep them alive, they would be busy extracting the juice.

Dr. COLEMAN.—They can't keep them alive for ever. The green bug will only live for two or three weeks without any food.

Mr. TIPPING (Coorg) said that with regard to the white fungus which attacked green bug he had noticed last year the length of time which it continued.

Dr. COLEMAN.—What about black fungus? Which have you most in evidence?

Mr. TIPPING said that he thought it was black fungus. It started before the monsoon. After the monsoon started white fungus also started. The point he wished to draw attention to was that white fungus lasted long after the rain had finished.

Dr. COLEMAN said that he would like to mention a matter about which he had not spoken in the forenoon. It was about an interesting insect that had been sent to Mr. Anstead by Mr. Nicolls and Mr. Anstead had sent it to him. Mr. Nicolls had found it on the lantana. As far as he could make out the bug was a new importation into India. It had never been mentioned before, and not only was this particular insect not known, but the group to which it belonged was not known. It was known in the West Indies where it was the chief agent for keeping lantana under control. The Hawaiian Government imported an insect from Mexico to destroy the lantana. One of these insects was the lantana seed fly which destroyed the seed of the lantana. The particular bug he was referring to was not a fly, it was a bug and fed on the leaves. As far as he could make out it had not been imported into the Hawaiian Island he had been assured in Honolulu in 1913. He looked up this particular bug working on lantana; but he would hardly like to advise introducing it, because it attacked other plants. He did not know what other plants it attacked. He proposed to see what it did to lantana and what it was likely to do to other plants in which planters were interested. If he found that it was absolutely safe, then it might be introduced.

Mr. TIPPING.—I hope in the meantime you will keep it safely chained up (Laughter).

Mr. J. G. HAMILTON.—What is its name?

Dr. COLEMAN.—*Orthesia insignis*.

Mr. HAMILTON.—That was the insect that I told you was feeding on tea in Ceylon.

Dr. COLEMAN.—I am glad of the reference. I thought I had heard of it before.

Mr. NICOLLS (Nilgiris).—A number of our plants came from Peradeniya. Possibly this insect came from there.

Mr. ANSTEAD.—When I was in the West Indies, we sent plants to Ceylon and to the Ooty gardens. As Mr. Nicolls is a keen gardener, it may have come that way.

Dr. COLEMAN said that he would certainly send for the bug. He did try to introduce it, but it lived two weeks. He conceived the idea of sending them by cold storage, but owing to the mistake of steamer agents and others this plan went hopelessly adrift. When next he made arrangements to go to Honolulu he would bring them with him.

Mr. TIPPING said that as far as the coffee planters were concerned he did not think Dr. Coleman would get much sympathy for the lantana seed fly. The lantana was regarded by them as a sort of milch cow as it was very useful to them. He was going to suggest something with regard to borer and that was painting the stems of the coffee with fish oil that they had heard so much about.

Mr. DANVERS said it was a very curious thing, but they heard all round that it had been a bad season for borer, but as a matter of fact the losses in his district had been much less than it was for many years previously.

Mr. ANSTEAD said another well-known fact about borer was that when ever they had a district in which the bamboo was in flower they always heard that in that district it was a bad year for borer. He always thought that the coffee borer lived in the bamboo and when the bamboo died, the borer came to the coffee. He thought that it would be admitted that the flowering of the bamboo invariably preceded a bad year for borer in the locality.

Mr. DANVERS.—It was after such a flowering of the bamboo that the first big invasion of borer occurred in Coorg.

Mr. TIPPING said that he had heard last week from Mr. Chisholm, an old coffee planter of Coorg, who maintained that the dying out of bamboo was the signal for a recrudescence of borer. He said that coincided with his experience, the last time the big bamboo died out the same thing occurred. On the other hand, Mr. Tipping said during the last four or five years, during which there had been no flowering of the bamboo, borer had been steadily on the increase in Coorg.

Dr. COLEMAN.—Mr. Browne had asked whether borer attacks rubber. He could not say, because he knew very little about rubber, although there was some rubber in Mysore. They probably knew though that rubber was attacked by a fungus which was almost identical with the fungus which attacked the arecanut—the koleroga disease. If it was not the same fungus it was so much like it as to be indistinguishable. He had seen the rubber fungus attack the fruit forming on the stems, though he had not heard of it as occurring on the leaves. It seemed to him that a similar cause was at the bottom of all three diseases and he could see no reason in the world—it was simply a question of money—why they should not use the same thing for rubber disease as they did for the arecanut disease.

The CHAIRMAN in this connection said that Mr. Chadwick had kindly allowed the Assistant Mycologist to go to Mundakayam to investigate this question of rubber disease. He had not been there long enough to come to any very definite conclusion, but he (Chairman) would like to read an extract from a letter which he had received which would show what was being done.

Mr. WADDINGTON asked what was the treatment for arecanut disease.

Dr. COLEMAN.—Bordeaux Mixture with an adhesive added.

Mr. ANSTEAD said that Mr. Kirk had made some experiments in trying to stop the fruiting of the rubber which had never been published. It was first suggested that the flowers should be cut off, but the conclusion arrived at was that this was impossible. He then tried spraying the flowers with water, the idea being to make the flower unfruitful. The experiment came to an end because there was not sufficient water.

Mr. WADDINGTON said that there was a tendency in the Mooply Valley experiments for the tree to attempt to reflower after the fruit had been cut off.

The CHAIRMAN said that he would like to ask a question. Mr. Anstead had pointed out that cutting off the flower had been impossible. He had carried out some experiment in manuring and he had found that the plots so treated had not suffered to the same extent. He would be glad to hear if any one had any experience on this point.

Mr. ANSTEAD replied that as far as manuring was concerned, that was one of the problems that would have to be tackled when they got their experimental stations. With regard to spraying of big areas, he called attention to a power-spray that he had seen used with great effect when he was in England on leave recently.

Mr. DANVERS said that he would like to hear something about Mr. Frattini's experiments in spraying to keep down black rot, etc. It seemed to him from what he had heard that cultivation in future was going to be largely a matter of spraying and that manuring methods were going by the board.

Mr. ANSTEAD replied that what Mr. Danvers had said was what more or less had happened. It might however have been the result of an accident. To make sure, they were carrying out a double series of experiments in spraying which ought to give definite results.

The Pests Act.

Mr. ANSTEAD said that he had nothing to say on this subject, except that he was convinced that an internal Pest Act was absolutely necessary.

Mr. D. T. CHADWICK, I.C.S. said, that, as the Chairman had said in his speech, the Government of Madras were already considering the drafting of a Bill on the lines of the Cattle Diseases Act. As a matter of fact the draft had been sent up to Government; but before it came before the Legislative Council it would be sent to the planters for their opinion. The subject was a step further on than it was last year.

The Secretary read letters from the Government of India and the Government of Madras on the subject.

Dr. COLEMAN said that in Mysore a Bill had been drafted and submitted to Government, but it had apparently slipped their mind.

Mr. C. H. BROWNE said that as far as Mysore was concerned he was indifferent whether they had it or not. He was quite convinced that it would be impracticable and would never be used. He spoke from his experience of the Game Laws. A few honest men took out licenses and suffered; 999 men did not take out licenses and did what they liked. The administration of the Act was so difficult that it became a dead letter. He was quite convinced that the Pests Act in Mysore would meet with the same fate.

Dr. COLEMAN.—I presume that if an internal Pests Act is passed I shall have the working of it. That may make a difference.

Mr. BROWNE.—I am glad that Dr. Coleman will have the working of the Act and I am certain that he will do it efficiently, but I must say that I am glad that I am not in his place.

Dr. COLEMAN said that he found in the villages that it was quite impossible to get co-operation, so what he proposed to do was to

declare individual villages infected, and then to hammer away until the people saw that the thing was a success and would work it themselves. All that he wanted to do was to compel other villagers to do the same thing.

[COMMITTEE].

Mr. P. G. TIPPING said that as far as Coorg was concerned the general opinion was that a Pests Act would do them little good. He would, therefore, endorse what Mr. Browne had said. This might not be his individual view, but it was that of his Association.

Mr. ANSTEAD.—May I point out that we are going back on what we have already approved by a Resolution.

Mr. TIPPING said that he was not opposing the measure, he was only stating what the feeling in the district was. He was not opposing the measure, nor had he been instructed to do so.

Mr. HAYWARD (South Mysore) said that he was opposed to what Mr. Browne had said. If they had the Pests Act they would have the power of dealing not only with their own estates, but also with those of their neighbours, which was the great source of trouble at the present moment.

The CHAIRMAN said that before going into open Meeting he would like to read the Resolution which he proposed to put from the Chair:—

“That in view of the correspondence from Government that we have just had read to us, we are glad to hear that the matter is being taken up, and that the Planting Member be asked to keep us advised on the subject.”

The Resolution was then put in open Meeting and was adopted.

Bees and the Pollination of Coffee.

Mr. GUY TURNER (Shevaroy) in opening the discussion on this subject said that Mr. Bainbrigg Fletcher, when he was present at the Annual Meeting two years ago, told them that he regarded bees as very useful and also that they should do their best to protect and encourage them within the limits of their estates. Although bees were not absolutely essential to the successful pollination of coffee, still they were of importance particularly in securing cross fertilisation. In the Shevaroy they were destroyed in great numbers for the sake of their honey. It was this wholesale destruction that they were trying to combat and under Mr. Fletcher's advice the Forest Department was asked to refuse to issue licenses to collect honey in certain forest areas, except under certain restrictions. The Government had now approved of the suggestions made by Mr. MacCarthy of the Forest Department. These suggestions were that estate managers would communicate to the Forest Officer the boundaries of estates adjoining Government lands and so help the Forest Department to prevent the taking of combs. The Shevaroy were only a small range about 16 miles long by 9 broad so that the area to be protected was a small one. They had asked the Forest Department to give protection over the whole of this area and make the gathering of honey there penal under the Forest Act. He was pleased to be able to say that the Forest Officer of South Salem had informed them that honey would not be sold in future by the Department in that portion of the Shevaroy included in the South

Salem Forest Division. He had no doubt that they would get an equally satisfactory reply from the Forest Officer of North Salem. He thought that they ought therefore to pass the following Resolution that he proposed to move.

“That the Government of Madras be thanked for the interest that they have taken in the subject of bees and their effect upon the pollination of coffee, and that the District Associations concerned be asked to co-operate in the matter with the Forest Department along the lines suggested by Mr. C. D. MacCarthy recommended in G. O. No. 3588, Dec. 1914.”

Mr. P. G. TIPPING (Coorg) seconded the Resolution remarking that he was instructed to write to their Forest Officer in Coorg on the same lines and the request met with the same courteous treatment.

The Resolution was put to the Meeting and carried.

The Experimental Plots.

Mr. DANDISON (Nilgiris) read a short report of the inspection he was asked to make on the experimental plots on the Nilgiris.

The CHAIRMAN said that the delegates were much indebted to Mr. Dandison for the trouble he had taken in visiting and inspecting the experimental plot.

Mr. DANDISON'S REPORT.

I had a look at the experimental plot about a fortnight ago and I must own I was disappointed with the results so far. I should say it is owing to the dense and probably unsuitable shade that the growth of the plants generally is so poor. They seemed to be suffering from want of light and from drip from the trees.

There is however no reason why the coffee should not grow well if the shade is thinned out or better still if cut down and replaced by more suitable trees.

At the bottom of the plot the growth of the first planted hybrids is passable, the plants marked BH1 and BH2, a Robusta and a Saklaspur No. 2 being the best. These I understand were planted in April, 1912.

Of the November, 1912 planting, one Jamaica Arabica shows fair growth but the rest of them are disappointing.

Hamilton's 3rd generation has possibly come on the best of this class.

As to the suitability of the site opinions have been expressed for and against. Time will prove this point, but as regards growth if they are to develop into healthy bushes they must be more carefully attended to especially in the way of shade regulation.

I might add there is a little bug on some of the bushes or I might say all varieties and that comparisons are not possible or fair under what I consider unfavourable growing conditions.

Railway Freights on Tea Seed.

Mr. A. S. DANDISON (Nilgiris) said this item was on the Agenda of the U. P. A. S. I. last year, and as, so far, we have not been able to get a satisfactory reply, from our point of view at least, from the railways concerned, we are bringing it up again. Booking Northern India tea seed by passenger train to this Presidency is at present very costly and the delays that sometimes occur when it is sent by goods train mean a big loss by the seed going bad. A recent instance may be quoted of delay in goods train arrangements. A member of our Association writes as follows. "Six cases of tea seed ordered from the Tengri Tea Company, Hoogrigan P.O., Assam-Bengal Railway Station Bowiti Road on the 7th February, arrived at Mettupalayam on the 27th March, 40 days in transit, say 7 weeks. I understand that tea seed is run on the Assam-Bengal Railway line by passenger train at goods rates so it may be accepted that the Indian Railway system from the Assam Railway junction is responsible for the time taken in transit, more protracted than getting a shipment of tea to the Home market."

There seems to be no remedy in a case like this. Mr. Nicolls last year quoted an instance of tea seed consigned to the Anamalais finding its way to the Wynaad. The Traffic Superintendent when interviewed about the matter regretted the mistake, but said that the Railway would not accept responsibility; all they undertook was to do their best. The point of the railway companies concerned is that the amount of tea seed carried is too small to make it worth while establishing a special rate, but as tea seed is without "perishable," I think that, as such, railways might reasonably be asked to include it within their schedule of perishable articles. I, therefore, beg to move the following Resolution.

"That this Association continue to approach the railway companies asking them to take more care over the transport of tea seed to ensure prompt delivery at the correct destination and that the various railways concerned be asked to include tea seed in their schedule of perishable articles."

The Secretary read the correspondence that had taken place with the railways concerned.

Mr. WRIGHT (Kanan Devan) seconded the Resolution as it dealt with an important subject to all District Associations interested in tea, as all got consignments of tea seed from Northern India.

The Resolution was carried.

Shipping Freights.

Mr. LEE (Kanan Devan) in moving a Resolution on this subject alluded to the great discrepancy existing between the rates ruling in South India and those ruling in Calcutta. Tea shippers there had an agreement with steamship companies called the Liner's Conference, composed of the P. and O., Harrison, B.I.S.N. Co. and the Clan Line, to ship tea, on terms arranged by the Indian Tea Association to ship tea, at 30.5 shillings per ton of 50 cubic feet. After the outbreak of the war the steamship Companies notified that the agreement had been suspended, and that in future there would be a new agreement at 47.6 shillings per ton of 50 cubic feet, and that arrangement now held good. Coming nearer Home he would compare those figures with the rates being charged at Tuticorin. Before the war they could ship at 33

shillings per ton. After the outbreak of the war it rose through 41.3 shillings, 46 shillings a ton at which it now stood. They were consequently paying 96 shillings while their brother-planters in Northern India were paying 47.6 shillings a ton. He was indebted to the Chairman for the figures he had given and they spoke for themselves. It certainly behoved them to take vigorous action to secure relief from the heavy burden that had been imposed on them by the shipping companies. He therefore would propose the following Resolution.

“That this Meeting take every possible step to secure a reduction of and more regular freights for tea, coffee, rubber and other products from South India, specially invoking the assistance of the Chambers of Commerce in Madras, Tuticorin and East and West Coast ports.”

Mr. NICOLLS (Nilgiris) seconded the Resolution and in doing so he said the matter was a very serious one. He reminded delegates that last September the Nilgiri Planters' Association met and brought this matter before the Association and suggested that it ought to do something to try to control the shipping companies on the coast and ask the Government to interest themselves in the matter. They did not get very far in that direction. Subsequently the Wynaad Association backed up the action of the Nilgiris. He believed that there were now in Bombay six Hansa Line steamers capable of carrying 10,000 tons of 50 cubic feet. If the Indian Government would only release these steamers, it would go a long way to relieve their present difficulties. He thought that the matter was so serious that something must be done.

The CHAIRMAN put the Resolution to the Meeting which was carried unanimously.

The delegates then adjourned for the day.

Fourth Day, Thursday, 19th August, 1915.

The delegates met at 10 A.M. in the Resident's Court.

The CHAIRMAN in opening the Meeting said that as the acoustic properties of the room were not all they should be and that as there was bound to be noise from the traffic outside, he would ask speakers to speak up. As they were well up in their programme, he hoped that they would get through the remaining business by the afternoon.

The Tea Cess Committee.

Mr. WINTERBOTHAM (Central Travancore) asked the Hon'ble Mr. Barber whether he could tell them anything about the India Tea Cess Committee's work.

The Hon'ble Mr. BARBER.—With regard to the pushing Indian tea in India?

Mr. WINTERBOTHAM.—Yes.

The Hon'ble Mr. BARBER said that on the 29th January last, the Committee allotted £6 000 for this purpose during the year ending the 31st March, 1916. A good deal of consideration was given to the matter by a Committee which in due course formulated its proposals which were confirmed by the Tea Cess Committee at its last half-yearly Meeting. Mr. Barber then read the following scheme :—

INDIAN TEA IN INDIA.

The Committee stated in their last Annual Report that the question of promoting the sale and increasing the consumption of tea in this country was still engaging their attention. They made no allotment at their Meeting on the 21st January, 1914, but at the Meeting on the 29th January, 1915, they allotted £6,000 for expenditure during the year that will end on the 31st March, 1916. In the meantime the Executive Committee had given the matter a good deal of attention. In due course they formulated their conclusions, and these the Cess Committee confirmed at their half-yearly Meeting on the 31st July, 1914. The conclusions, briefly stated, were :—

(a) That a qualified and well-paid Commissioner with a suitable staff should be engaged. This officer and his assistants would be required to undertake what may be described as an educational propaganda in a selected district. They would lecture on the advantages of tea drinking, the best method of brewing tea, and similar subjects. They would also prepare and distribute pamphlets, leaflets, hand-bills and other literature, in the vernaculars, and where necessary in English. They would interest dealers and shop-keepers in the sale of tea; and would work in conjunction with recognised tea distributors. They would keep a careful watch on the sale of tea-waste and of low-quality and adulterated tea.

(b) That the subsidising of recognised distributors by free grants of tea should be a feature of the scheme. Assistance would also be given in the form of advertising at local exhibitions, fairs, melas, and other similar gatherings. The distributing trade would be informed that the Cess Committee would assist any distributors willing to push tea, provided of course that they sought to introduce only good qualities.

(c) That there should be no attempt on the part of the Cess to sell tea. That is to say, the Committee would not seek to enter into competition with the regular distributors. The principal object of the scheme would be to educate people in the direction of tea drinking, and to help the distributors to push their business.

The question of engaging a competent Commissioner proved to be one of considerable difficulty, but eventually the Committee were fortunately able to secure the services of Mr. H. W. Newby, who was until recently the Calcutta Manager for Messrs. Lipton, Ltd. Mr. Newby has had a unique experience of the work of pushing the sale of tea in India, and the Committee believe that he will materially advance the objects that they have in view. He proceeded to England for a short holiday in May, and will take up the appointment of Cess Commissioner on his return to India in October next. During his stay in England he is making preparations in the way of obtaining advertising matter, etc.

Mr. NEWBY, the Manager of Lipton's in Calcutta, was selected to do the work. That was all the information that he could give at present. An account would be forthcoming at the end of March next year in pushing the consumption of Indian tea in India. Mr. Richardson had told him that a certain amount was spent at the Dusserrah Exhibition, the sum he had mentioned was spent in connection with moving pictures.

The Rubber Growers' Association.

The CHAIRMAN said that the next item was the subject of the Rubber Growers' Association, which Mr. Waddington would explain.

Mr. WADDINGTON, (West Coast) said: Mr. Richardson has kindly allowed me to go through the correspondence with respect to the Rubber Growers' Association and I have consulted all delegates interested in rubber as far as possible.

I propose therefore to read only that part of the correspondence necessary to the understanding of the question as it at present stands.

38, EASTCHEAP, LONDON, E. C.,
11th December, 1914.

DEAR SIR,

At a recent Meeting of the Council of the Rubber Growers' Association the question of having representatives in the rubber growing colonies and states was considered, and it was unanimously decided that the industry would materially benefit by such representation.

It was felt that it would be unnecessary to form new Associations if it were found possible to work with the existing organisations, and I am requested to ask if your Association can see its way to appoint a small Committee to act in the manner herein suggested.

I enclose an extract from the Minutes to show what is in the mind of the Council, and these of course are merely directory and not necessarily to be considered hard and fast rules for forming the Committee.

The work as representatives of this Association would consist in bringing before the Council all and sundry matters that may suggest themselves for the good of the industry in general and Southern India in particular, and keeping it advised upon any matters of importance which from time to time may arise.

The policy of the Colonial Office appears to be to grant to the Local Governments a large measure of freedom when dealing with matters affecting the Plantation Rubber Industry, and indications have been given that representations made by recognised bodies in the various Eastern Colonies and Dependencies would be welcomed.

You will see in the extract from the Minutes how we propose that the finance should be dealt with, and I will be pleased to receive suggestions from your side in regard to this.

It is the desire of the Council to co-operate cordially with the Southern India representatives as it is felt that a mutual exchange of opinions upon the many points which periodically arise will be of immense benefit to the industry as a whole.

Yours faithfully,
(Sd.) FRANK G. SMITH,
Secretary.

[ENCLOSURE].

At a Meeting of the Council of the Rubber Growers' Association (Incorporated) held on 7th December, 1914, the following report of the Committee appointed to consider the advisability of obtaining direct representatives of the Association in Southern India was unanimously adopted:—

Report of Committee.

Resolved: "That the Committee are of opinion that it is desirable to arrange for representation of this Association in Southern India.

They are of opinion that the best means of arranging for this is as follows:—

That the Planters' Association of Southern India be asked to appoint a small Committee consisting of eight planting members and three or four mercantile members.

The Secretary and Chairman of the Planters' Association to be members *ex-officio*.

Such Committee to act as advisers and correspondents of the Rubber Growers' Association as well as their representative in all matters affecting the interests of the rubber growing industry.

If this Association is willing to undertake this work a reasonable sum should be voted annually in payment of the secretarial and office expenses."

The Rubber Growers' Association was formed to advance the interests of rubber producers in every way possible by combination, etc.

There is considerable confusion between this Association and the Rubber Growers' Association Research Committee, which is an offshoot of the Association but is supported by a separate subscription of £50 per annum from each Company or Proprietors of Estates belonging to it.

My Association, the Mundakayam Planters' Association and I think other Associations interested in Rubber were strongly in favour of the U. P. A. joining the Rubber Growers' Association and this was carried into effect in March-April last. Now that we have their proposals for the forming of a branch before us I strongly recommend that they are carried out. That Committee should be as representative as possible of the different districts and interests concerned, both planting and mercantile.

The difficulty of carrying on business consisting of members scattered over our immense areas is very great but we have I think already an Association which will help us. The Combined Travancore Planters' Association holds one or two Meetings annually when many of the planters who would be members of the Committee meet and the same opportunity might be taken for the business of the Rubber Growers' Association to be attended to. I would go further and ask the Combined Travancore Planters' Association to accept the secretarial work of the Committee. I beg to move the following Resolution:—
“That a local Committee in Southern India of the Rubber Growers' Association, as outlined in the Association's letter of the 11th December last, be formed as early as possible.”

“(a) That the Committee consist of 8 planting and 4 mercantile members, the Chairman and Secretary of the U. P. A. S. I. to be members *ex-officio*, the latter to act as Secretary until other arrangements can be made.

(b) That the Combined Travancore Planters' Association be asked to allow this branch of the Rubber Growers' Association to be worked in conjunction with their business and meeting.

(c) That the following gentlemen be asked to serve on the Committee as mercantile members: The representatives of Messrs. Aspinwall & Co., (Cochin), Messrs Darragh Smail & Co. (Alleppey), Messrs. Peirce, Leslie & Co. (Calicut). As planting members that a representative be nominated by the members of each of the following Associations: Mundakayam, West Coast, South Travancore, Coorg, Anamalai and Shevaroy Planters' Association, with power to add to their number.”

Mr. J. J. MURPHY (Mundakayam) seconded the Resolution.

After some desultory discussion of details in Committee the Resolution was put and carried.

The Labour Department.

The CHAIRMAN said that the Report of the Labour Department and the Accounts had been presented on the opening day. If anybody had any questions to ask this was the proper time to do it.

Some suggestions regarding the auditing of the accounts and explanations regarding the details were made in Committee.

Mr. WINTERBOTHAM (Central Travancore) said: I am requested by a member of my Association (a non-supporter of the Labour Department) to ask Mr. Martin for an explanation of the words he used in his remarks at the Extraordinary General Meeting of the U. P. A. S. I. of 1914, when the working of the Labour Department was under discussion, which were as follows:—"They would also have to agree among themselves how to deal with black sheep and with estates that did not support the Labour Department."

I shall be glad if Mr. Martin will clear up this point, as I know it has caused a certain amount of mistrust among non-subscribers to the Labour Department.

Mr. MARTIN said that he was glad to have an opportunity of explaining. When he spoke about "black sheep," he meant black sheep within the fold. He was in no way talking about the non-subscribers to the Department.

Mr. WINTERBOTHAM.—What about estates that do not support the Labour Department?

Mr. MARTIN.—Did I say anything about them?

Mr. WINTERBOTHAM quoted the sentence given in the letter read above.

Mr. MARTIN.—I did not couple them together; black sheep are one thing and estates that did not join the Department were another. The two things were quite distinct—how to deal with black sheep and how to deal with estates that did not join the Department. We certainly have adopted a policy with regard to estates which do not join the Department, and that policy is well known. It is one of non-interference.

Mr. WINTERBOTHAM thanked Mr. Martin for the explanation.

The Labour Control Committee.

Mr. MURPHY (Mundakayam) said that he had nothing to say about this matter. He had mentioned something about it at the last Meeting of his Association when the Chairman said that he would deal with it. He was not prepared with any Resolution.

The CHAIRMAN.—I promised that the matter would be brought up for discussion.

Mr. MURPHY.—If you wish me to do so I am quite prepared to move a Resolution. He then proceeded to explain that what he objected to under the present rules of the Labour Department was that the Chairman of the U. P. A. S. I. was *ex-officio* a member of the Labour Control Committee. It was quite certain therefore that the delegates would not like to elect as Chairman of the U. P. A. S. I. a member who was opposed to the Labour Department. It was certainly quite natural that a subscriber to the Department would object to appointing a Chairman of the U. P. A. S. I. who was *ex-officio* a member of the Control Committee, a man who was opposed to the Labour Department.

Mr. WADDINGTON, (West Coast)—No.

Mr. MURPHY.—He certainly would.

The Hon'ble Mr. BARBER again, as a member of the Control Committee, was in sympathy with what Mr. Murphy had said. He therefore begged to move the following Resolution :

“That in the event of the Chairman of the U. P. A. S. I. not being a subscriber to the Labour Department he shall not be a member of the Control Committee, and that the Association be empowered to appoint a subscriber to fill the vacancy on the Control Committee and the Committee be empowered to appoint its own Chairman.”

Mr. MURPHY seconded the Resolution, which was carried.

Position of the Members of the U. P. A. S. I. who are not subscribers to the Labour Department.

The CHAIRMAN said that he wished to make a statement from the Chair. He had been asked what was the position of members of the U. P. A. S. I. who were not subscribers to the Labour Department. Their position financially was not different from what it was before the Labour Department was instituted.

Mr. MURPHY said that when he raised the question, the Chairman assured them that the liability of each Association was only Rs. 100 it was not worth talking about.

Correspondence between the Deputy Director and the Manager of Kuppukayam Estate.

Mr. MURPHY said that he was not going to raise the point of order because of what Mr. Barber had told him.

Mr. ALYMER MARTIN (Director of the Labour Department) said :

Mr. CHAIRMAN & GENTLEMEN,

The Mundakayam Planters' Association by a majority of 63 to 29 decided to send this correspondence to the Secretary of the U. P. A. S. I., with their Meetings opinion of it. So far as can be seen from what was published, this action was taken without any definite object. Apparently the correspondence in the opinion of the Mundakayam Planters' Association was to repose in the Archives of the U. P. A. S. I. for the benefit of some future antiquarian. There seems to be a disinclination to bring the matter into the light of day, as no instructions about it have been given to the Mundakayam delegate.

It will surprise you to hear that the full correspondence between Mr. Day and Mr. Hamond was not sent to the Secretary of the U. P. A. S. I. The suppression was probably made with the laudable purpose of saving time and trouble to the aforementioned antiquarian, it is nevertheless unfortunate, because, unless he is in possession of all the facts, he cannot come to a sound judgment in this matter. I hope to show you that certain letters which passed previously to those read out to you, have a bearing on the issue. I do not think the Mundakayam District Association can have had the full correspondence before it. Mr. Murphy tells me he had knowledge of it, as indeed he must have

had, as part of it was with his own estate. I gave all the correspondence to Mr. Murphy yesterday so that he is now in full possession of the facts so far as I know them. The correspondence began on the 9th of April when Mr. Day wrote as follows to Mr. Hamond :—

THE MANAGER,

Kuppukayam Estate,

Mundakayam P. O.

DEAR SIR,

A maistry named Colandavalu has applied to a subscriber to this Department for an advance of Rs. 500 for 50 coolies, and he has produced a certificate from Mr. Ashton Hamond, dated 6th March, 1914, stating that he has been employed on Kuppakayam Estate for the three years previous.

The maistry says that he did not take advance for the year 1914-15. I shall be obliged if you will inform me if his statement is correct so far as you know. Any information you can give me about this man will be gratefully received.

9th April, 1915.

Yours faithfully,

(Signed.) E. H. F. DAY,

Deputy Director.

Mr. Hamond's reply, of which I hold the original in my hand is dated the 12th of April and reads as follows :—

THE DEPUTY DIRECTOR,

U. P. A. S. I.,

Coimbatore.

DEAR SIR,

In reply to your letter dated 9th *re* Colandavalu Maistry. He left me on 6th March, 1914, and after settling his account to save some trouble I paid up a debt for him of Rs. 83-10 and for which I hold a promissory note for that amount. Since then he has been in the employ of the Superintendent, Yendayar Estate, from whom he should hold a clear discharge or otherwise his position is doubtful.

Yours faithfully.

(Signed) ASHTON HAMOND.

On the 14th idem Mr. Murphy wrote to Mr. Day.

YENDAYAR, MUNDAKAYAM,

14th April, 1915.

THE DEPUTY DIRECTOR,

Labour Department,

Coimbatore.

DEAR SIR,

Mr. HAMOND has sent me on a copy of your letter of the 9th with reference to Colandavalu Kg. This man on leaving Mr. Hamond took an advance from me has coolies here at present and owes me money. If you wish to employ him I have no objection provided you will pay

his debt. I wish to get rid of him as I am afraid I may have too many coolies soon. Four other maistries from Erode side owing money to the estate are said to have been taken on by estates subscribing to your Department. Their names are Nanjappan, Isaac, Ramaswamy and Mari.

Yours faithfully,

(Signed) J. J. MURPHY.

To which Mr. Day replied on the 27th of the same month as follows :

THE MANAGER,

Yendayar Estate,

Mundakayam.

COLANDAVALU, SON OF KARLIE.

DEAR SIR,

I am much obliged to you for your letter of the 14th instant to which I have been unable to reply before as I have been away from headquarters. The estate to which this maistry applied for an advance has been advised not to employ Colandavalu as the result of my enquiries both in his village and from your estate.

Regarding the concluding paragraph of your letter relating to Nanjappan, Isaac, Ramaswamy and Mari, I am sure that no subscribing estate has intentionally taken these coolies knowing that they are indebted to your estate. If you will give me the necessary information I will see what can be done in the matter, as, personally, I am averse to making things easy for the unscrupulous maistry to profit by the dissensions amongst planters.

Yours faithfully,

(Signed) E. H. F. DAY,

Deputy Director.

And on the same day he wrote to Mr. Hamond :

THE MANAGER,

Kuppakayam Estate,

Mundakayam.

COLUNDAVALU, SON OF KARLIE.

DEAR SIR,

I have to thank you for your letter of the 12th instant and to apologise for my delay in replying which was caused by my absence from headquarters. As the enquiries I made about this man in his village were unsatisfactory, I advised the estate, which enquired about him, not to advance him.

I have heard from the Manager, Yendayar Estate, to whom I have replied direct.

Yours faithfully,

27th April, 1915.

(Signed) E. H. F. DAY,

Deputy Director.

You will observe that so far the correspondence is perfectly courteous and that Mr. Hamond showed a willingness to be helpful, and a disposition to protect the interests not only of the estate of which he is in charge, but also those of his neighbours. This was distinctly encouraging from all points of view, and you will note from Mr. Day's letters that he was willing to be helpful in return. Expecting a continuance of Mr. Hamond's previous courtesy, he wrote the letter dated 29th May, which is the first one put before the Secretary of the U. P. A. S. I. and which reads as follows :—

THE MANAGER,

*Kuppukayam Estate,
Mundakayam.*

DEAR SIR,

A maistry by name of M. Kanaka Ratnam, son of Mathai, Thothampatty Village, Erode Taluk, has applied to me for an advance. He said that he was last employed upon your estate and that he worked off his advance of Rs. 750 by February 1913; for which he produced two cancelled contracts endorsed by Mr. Hamond dated 12th February, 1913; one of these contracts is between a Labour recruiter named P. Moses and the applicant, and the other is between the Kuppakayam Estate and the applicant.

I should be much obliged if you would inform me if this man is a good maistry and also, more important, if you have any information as to whether he has been working on any other estate since 12th February, 1913 when you cancelled his contract.

Yours faithfully,

29th May, 1915.

(Signed) E. H. F. DAY,

Deputy Director.

But between the 12th April and the 7th June something had happened to completely change Mr. Hamond's attitude: whether it was that he was got at, or had been upbraided for being polite to the Labour Department, whether another rumour had got about the Mundakayam District, or whether it was mere caprice on Mr. Hamond's part, I do not know, and cannot even guess, but you can imagine Mr. Day's surprise on getting the provocative reply he did which I will proceed to read :—

KUPPUKAYAM ESTATE,

MUNDAKAYAM, 7th June, 1915

THE DEPUTY DIRECTOR,

*Labour Department,
U. P. A. S. I., Coimbatore.*

DEAR SIR,

In reply to your letter dated 29th May, I beg to inform you that this Company is not a subscriber to the Labour Commission or an upholder of it.

Yours faithfully,

(Signed) ASHTON HAMOND,

Manager.

Filled as he always is with the determination to serve the interests committed to his care, and deeming it incomprehensible how anyone else could be otherwise, he wrote the letter of the 10th June, which must be the one complained of and which reads as follows :—

THE MANAGER,

Kuppukayam Estate,

Mundakayam.

M. KANAKA RATNAM MAISTRY.

DEAR SIR,

I am in receipt of your letter of the 7th instant in reply to mine of the 29th ultimo relating to the above.

I asked you a few very simple questions in my letter to which any planter might be expected to reply even if only as an act of courtesy.

You not only fail to reply but indicate that your reasons for not doing so are that your Company is neither a subscriber to nor an upholder of this Department.

I can only conclude that you are squeamish of benefiting by the labours of this Department because you do not support it financially, for otherwise your failure to reply to my questions can only be attributed to a spirit of hostility which will benefit nobody but dishonest maistries, and this at the expense of the unfortunate members of the British public who are shareholders in South India Rubber Companies.

If all non-subscribers treat letters of enquiry from the Department in the manner in which you have done, you and your fellow non-subscribers cannot blame this Department and its supporters, if maistries, who are in debt to non-subscribing estates, are taken on by subscribers to the Department.

My wish is to "play the game," but, if insuperable difficulties are put in my way by those whom I have no wish to injure in any way, I cannot be blamed if I do not go out of my way to treat them as one planter up to now has been expected to be treated by another.

10th June, 1915.

Yours faithfully,

(Signed) E. H. F. DAY,

Deputy Director.

I shall now read out to you the contents of Mr. Hamond's letter of the 17th :—

KUPPUKAYAM ESTATE,
MUNDAKAYAM, 17th June, 1915,

THE DEPUTY DIRECTOR,
Labour Department,
Coimbatore.

FROM

ASHTON HAMOND,

Manager,

Central Travancore Rubber Co., Ltd.

SIR,

I am in receipt of your letter dated 10th instant, the tone of which is objectionable, and your attack on me, for the reason that I wish to have nothing to do with the Labour Department offensive and officious. I propose laying it on the table at a coming District Planters' Association Meeting

Yours faithfully,

(Signed) ASHTON HAMOND,

Manager.

but Mr. Day's reply of the 25th June, with which the correspondence ended, has not been put before you. It reads as follows :—

THE MANAGER,

Kuppukayam Estate.

Mandakayam.

DEAR SIR,

I am in receipt of your letter of the 17th instant and note that you consider that my letter to you of the 10th instant was an attack upon yourself and also that it was offensive and officious. I regret that you should have taken this view of my letter as nothing of the sort was intended. I shall be glad to hear what view your Association takes of the matter.

25th June, 1915.

Yours faithfully,

(Signed) E. H. F. DAY.

Deputy Director.

The suppression of this letter, which contains an expression of regret and disclaims any bad intention on the part of Mr. Day appears to me to throw a lurid light on the subject. I do not like to use the word "underhand" but I ask you if it is quite straightforward. My own opinion is that on and after the 7th June, the attitude displayed in Mr. Hamond's letters is one of childish petulance, and that Mr. Day's righteous indignation was perfectly justified, and I hope you all agree with me. It is to the interest of every planter whether he is a subscriber to the Labour Department or not, to run scoundrels to earth. If non-subscribers were all to act as Mr. Hamond has done, which I gladly acknowledge has not been the case, the interest of every Proprietor and Shareholder in South Indian Estates must suffer.

You must further understand that Mr. Day is a man who has had personal dealings in London with many of the Directors of the Planting Companies owning Estates in South India. If a partial statement of the case comes to their notice, as it possibly may do, his personal and business relations with such people will suffer serious injury.

The whole thing may seem a trivial matter to be brought before the U. P. A. S. I.—a storm in a teacup, but the matter did not originate with me, but with the Mundakayam Association which sent the correspondence to Mr. Norton. I am glad we are in open Meeting as I think some notice of the matter should be taken in justice to Mr. Day and to the Department. The fact that the correspondence has been forwarded to the Secretary of the U. P. A. S. I., has been published in the public press, and if no defence from the Department is similarly published, it is open to anyone who is not acquainted with the facts, and who may not be disposed to be quite straightforward, to say that the matter was hushed up by the U. P. A. S. I. at the instance of the Labour Department. Should this be said by anyone, it is pretty certain to come to my ears, and another instance of underhand work will have taken place, with the consequence that it is my duty to expose it, and the result will be that bad blood is engendered, the very opposite of what Mr. Murphy desires.

It is in the interests of future peace and harmony that I ask for a proposal to be framed and passed in open Meeting. I might make a proposal myself, but I think it should come from some one else. I only ask that such a proposal should at the very least (1) clearly state the disapproval of this Association of Mr. Hamond's conduct. (2) its disapproval also of the mistake made by the Mundakayam Association in forwarding a correspondence representing a partial statement of the facts to the Secretary of the U. P. A. S. I., a complete vindication of Mr. Day, and an approval of the policy of the Department as disclosed in Mr. Day's letter of the 10th June. I think it only fair and due from the delegates here assembled, including Mr. Murphy, whose promise made yesterday to do his best to counteract underhand methods and statement, I gladly hail as having been made in the best sporting spirit.

Mr. C. H. BROWNE (North Mysore) said he thought it was quite natural that Mr. Martin should take up the cudgels on behalf of his Department. It seemed a small matter and could be easily settled if the Meeting decided that Mr. Day's behaviour was absolutely correct and the tone of his letters courteous. He would therefore propose a Resolution to the following effect namely

“That the Meeting is of opinion that there is no just cause of complaint in the Mundakayam correspondence tenable against Mr. Day who throughout the correspondence was reasonable and courteous, and thinks further that the Mundakayam Association will take the same view when the correspondence is laid before that Association.”

Mr. DANVERS (North Mysore) seconded the Resolution.

Mr. MURPHY (Mundakayam) said: Mr. Chairman and Gentlemen: I do not think that this matter should have been put on the Agenda handed to us on our arrival here. Under Rule X, 30 days' notice must be given before a subject can be discussed except with the unanimous consent of the Meeting. Had even a few days' notice been given I could have

brought with me to Bangalore the statement made by Mr. Hamond at the last Mundakayam Meeting and also a copy of Mr. Richardson's reply. I also imagine that delegates must be as tired of hearing of Mundakayam and the Labour Department as I am tired of speaking of it. I do not press this point because I would be sorry if delegates were to think that Mundakayam is in the least ashamed of its action, however, it may regret, as I think all delegates must regret, the correspondence. One man wrote what is called a stinker, the other replied with a snorter. Mr. Hamond told me that he received from the Deputy Director several letters asking for information regarding maistries and coolies, and that it took up too much of his time replying to the same, and he also said that he did not think the Labour Department would give him information were he to ask for same. With reference to this, I may mention that Mr. Martin in the concluding paragraph of his report spoke of 16 circulars containing the names of 139 men who should not be advanced by subscribers. These circulars were not sent to non-subscribers—though some of the information they contained was no doubt obtained from them. On behalf of Mundakayam, I am not in the least bit repentant. I still do not approve of Mr. Hamond's letter and I still think the Deputy Director's reply objectionable. Mr. Martin evidently desires to back up the Deputy Director and I admire him for his loyalty to his Assistants, but think he has not been wise in his action. I used whatever little influence I have in my district to prevent the matter being published in the public press, as I did not wish to give publicity to the fact that I think Mr. Day's letter objectionable, and that I did not approve of my friend Mr. Hamond's letter. Finally I may say that I do not think a salaried official of one of the Association's departments should be allowed to speak at this Meeting as a member of the Association. Mr. Martin ought to have mentioned his complaint in his report, the rejection of which I would then have been able to move. I said yesterday that I would use any influence I have to put a stop to underhand work, but I also said, and I repeat it now with all the emphasis at my command, that there is no underhand work in Mundakayam, and that the correspondence Mr. Martin has thought fit to read was not a plan to blackguard an individual. Mr. Martin read a letter from me why I don't know. Personally, I have no complaint to make against Mr. Day. Mr. Martin has looked on this matter as a convenient peg on which to hang an attack against my Association to which we object for an obvious reason it does not support his department. Although I have not pressed my point as to this discussion being out of order I strongly object to any Resolution being put to the Meeting.

Mr. MALCOLM (Wynaad) said that it seemed to him a great pity that the matter had been brought up at all, until the Executive Committee had dealt with it and unless the Executive Committee had decided that it might be published. He would suggest that the matter be allowed to drop with an expression of opinion that the Association approved of Mr. Day's behaviour.

Mr. MARTIN said that the correspondence had been sent by the Mundakayam Association not to the Executive Committee but to the Secretary of the U. P. A. S. I. That was how it came to be discussed as a U. P. A. S. I. matter. If it had been sent to him, he would have dealt with the matter departmentally, but it was not sent to him but to the U. P. A. S. I. Mr. Murphy had told them that Mr. Hamond had said that he had so many letters from the Labour Department that he had not time to answer them. As far as his knowledge went—and it was pretty extensive—no other letter was written to Mr. Hamond.

except that which had just been read out. He would ask Mr. Day if that was not so.

Mr. DAY.—Yes.

Mr. MARTIN.—Certainly no other letters had passed between Mr. Day and Mr. Hamond.

Mr. MALCOLM said it might be true that the matter was brought before the U. P. A. S. I., but was it not a matter that the Executive Committee ought to deal with. Surely all such letters ought to be dealt with by the Board.

The Hon'ble Mr. BARBER said that the matter was dealt with by the Control Committee in the first instance who thought it was quite reasonable that as a public accusation had been made against Mr. Day, that there ought to be public withdrawal or a public acknowledgment that he was not in the wrong. The Control Committee's Resolution that Mr. Day was in the right would not carry the same weight as a Resolution carried by the U. P. A. S. I. in open Meeting.

Mr. J. S. NICOLLS (Nilgiris) said that he thought that there was a considerable amount of confusion between as to what Mr. Martin had said and what Mr. Murphy had said. He thought the whole matter might have been easily settled if Mr. Murphy had got up in open Meeting and expressed the wish that he did not want the matter to go any further. He felt bound to say that he regretted that there had been this washing of their linen in public. Mr. Murphy could not possibly have had any wish to pursue this matter any further and if he had done as suggested, he did not think the matter would have gone any further.

Mr. MURPHY said that with regard to what had fallen from Mr. Barber regarding the attack made on Mr. Day in the public press, he would like to ask where was the attack made on Mr. Day in the press. The only thing that had appeared in print was a line in the *Mundakayam Association proceedings* published in the *Planters' Chronicle* which said :—

“Resolved that the correspondence be sent to the U. P. A. S. I.” They did not tell the public what their opinion was. As regards what Mr. Nicolls had just said, they all knew that he had done his best to keep the matter out of discussion and to have the whole thing stopped.

Mr. MARTIN said that it was quite true in the opinion of Mr. Murphy that the correspondence had not been published. At the same time people were left to draw their own conclusions from the fact that it had been sent to the U. P. A. S. I. Undue importance had thereby been given to the matter.

The Hon'ble Mr. BARBER said that while he was willing to apologise to Mr. Murphy if he had been inaccurate in what he had said, it seemed to him that if the matter had been deemed important enough to send to the U. P. A. S. I. it was quite possible that similar information was sent to somebody at Home who would probably take quite a wrong view of the matter. He did not know whether this had been done or not, but it was quite possible that it had been done.

Mr. MURPHY said that he knew nothing about that. He asked for a ruling on his point of order.

The CHAIRMAN said that he did not think that Rule 10 could apply. The item Labour was a standing subject on the Agenda and anything that came up.

Mr. MURPHY.—I bow to your ruling, but I don't agree with it.

Mr. MURPHY continuing the discussion said that he had been asked to make a statement that his Association had no wish to go on with the matter. He had explicitly said that those he represented had no wish to go on with the matter and he had asked Mr. Barber to stop the discussion.

The Hon'ble Mr. BARBER said that Mr. Day's position would have been unsatisfactory if the subject had not been discussed. They had only to put themselves in Mr. Day's position for one moment to realise what he felt on the subject. He knew that the correspondence had been sent up. Not only that but that a poll had been taken on the Resolution deciding to send the matter up to the U. P. A. S. I. for its decision on the matter. Under these circumstances he felt sure that Mr. Day was entitled to have his side of the question put before the Meeting. He understood that Mr. Murphy did not know the way the correspondence closed. He was not aware of the last letter that closed the correspondence in which Mr. Day expressed his regret that his remarks were taken in the way they were.

Mr. MURPHY said that letter was not sent.

Mr. BARBER.—If they had received that letter he thought the Mundakayam Association would have taken a different view of the matter.

Mr. MURPHY said he had been asked to put himself in Mr. Day's position. He had done so and felt that if he were Mr. Day he would have been ashamed of sending that letter. When he was a younger man he often wrote and sent letters which he afterwards regretted, now he wrote the letter but put it in an envelope and addressed it, but instead of posting it, he kept it for a day. He found in his cooler moments that he always tore those letters up. Personally he considered Mr. Hamond's letter objectionable and he also considered Mr. Day's letter objectionable. All that Mundakayam did was to send the letters to the U. P. A. S. I. They did not ask that any notice should be taken of it, they had no desire to injure Mr. Day in any way or anybody else.

Mr. DANVERS said that he would like to move the following amendment:—

"That the matter having been thoroughly ventilated and Mr. Day's position made satisfactorily clear to the mind of the Meeting the matter be allowed to drop and the discussion kept in Committee."

Mr. MALCOLM seconded the amendment which, after some further explanations, was duly adopted in place of the original Resolution.

Non-service of Warrants.

Mr. SIMCOCK (Anamalais) said that until very recently a planter on the Anamalais could always obtain a warrant under Act XIII of 1859 through a Vakil. That concession had now been withdrawn and no explanation whatever was given for the change. The result was that it was a great inconvenience. We had to post 40 miles away to the nearest Sub-Magistrate.

Mr. MARTIN said that while he was in perfect sympathy with the Anamalai planters, this was another matter on which they must be perfectly sure of their position. In connection with the work of the Labour Department he had some experience in the matter and he knew that the Sub-Magistrate was not to blame. He was acting under the orders of the Collector, his superior officer, and he must refuse to take a complaint against anybody from a Vakil. It was a criminal matter and criminal complaints must be laid by the principal. The only way out of the difficulty was to ask Government to put a Magistrate of sufficient standing and qualifications to deal with such matters in the Anamalais. After some further discussion the following Resolution was carried:—Proposed by Mr. E. W. Simcock, seconded by Mr. C. H. Browne.

“That the Secretary be instructed to invite the co-operation of planters to get the Government to arrange for a visiting Magistrate periodically to go to the Anamalai Hills for the purpose of issuing warrants and hearing cases under Act XIII of 1859.”

Alien Enemies.

Mr. GUY TURNER (Shevaroy) proposed and Mr. Tipping seconded the following Resolution:

“That this Association do support the action already taken in the matter of Alien Enemies by the Madras Chamber of Commerce and the European Association.”

The Resolution was carried.

The Planters' Benevolent Fund.

Mr. DANVERS (North Mysore) said that all knew that the Planters' Benevolent Fund was a most deserving institution and he thought that the Chairman's appeal was a very good one and was worthy of support. What struck him most on looking over the report was that there were only about 127 subscribers. He thought that before asking these subscribers to become life members they ought to hustle those who did not subscribe. He thought that the Secretary of the Association ought to be asked to push the claims of the Fund by writing to the Secretaries of District Associations to make further appeals and see what could be done as a total of 127 subscribers among all the planting community was utterly absurd. They might be called upon shortly to help friends who had done their duty by the country. They might have other funds from which they might benefit, but there was not the slightest doubt that the Benevolent Fund would be called upon also. He would like to appeal to all members of the community to come forward and subscribe more liberally—those who had already subscribed and more especially those who had not subscribed. The current expenses of the Fund were just a little under the current income of the Fund and Rs. 17,000 was a very small sum from which to provide for the calls that they might have on the fund in the near future. He thought that the Chairman's suggestion might be incorporated in the appeals to the planting community in Southern India.

Mr. NICOLLS (Nilgiris) again brought up the case of a Eurasian member of his Association who had been a subscriber to the Fund, but who had been forced to cease doing so by a change made in the rules which limited membership to European planters alone.

The CHAIRMAN said that he did not think that they should depart from their existing rules. At the same time they should be careful to see that men who were not eligible who had subscribed during the first year of the fund had their money returned to them.

Mr. C. H. BROWNE (North Mysore) said that he understood that the main object of bringing up this matter was to increase the membership to the Fund. He understood that there were 445 active members of the planting community in South India; that 300 of them did not subscribe. That should be their main source of income and the question was what was to be done to get these 300 to join. All would agree that they ought to join, but how could this be best done. He thought that they ought to issue direct appeals to all District Associations to get in all their members.

Mr. WADDINGTON (West Coast) said that the generosity of planters was proverbial. He had never met a planter who when asked did not subscribe to the Fund. It was a matter that rested entirely with Honorary Secretaries of District Associations. At this time last year out of the 42 members of his Association, only one did not support the Benevolent Fund. Since then there had been many changes in the *personnel* of his Association, so that he did not suppose that now more than half the members subscribed. This was a point that would have to be brought out in the appeal that was to be made. Many men only wanted asking. At a recent Meeting of his Association an appeal had been made for the Benevolent Fund and in a little while Rs. 300 was placed on the table. It was a simple matter and only required Honorary Secretaries to keep on driving and the men would be glad to come in. In the appeals that were to be made all they had to do was to put their needs clearly before people. Let people know that in the current year they had hardly covered their expenses. Men said "What is the use of going on with this Fund, nobody ever benefits by it," when as a matter of fact they did not know what was being done.

The CHAIRMAN put the following Resolution from the Chair :—

"That a powerful appeal be drawn up by the Secretary and sent to the Honorary Secretaries of District Associations for distribution among eligible members together with a request to all the Honorary Secretaries to push the interests of the Fund to the best of their ability."

The Resolution was adopted and the Meeting adjourned till 2-30 P.M.

Fourth Day, Thursday, August 19th.

Closing Session.

The delegates met for the last time in the Resident's Court at 2-30 P.M.

The CHAIRMAN said that they had added one more portrait—that of Mr. C. E. Abbott—to their gallery this year. He would now in the name of the Association ask Mr. J. G. Hamilton, a former Planting Member and an Ex-Chairman of the Association, to sit for his portrait before leaving Bangalore.

The proposal was received with acclamation.

The Rubber Exhibits.

Mr. WADDINGTON (West Court) next read the Report of the Committee on the Rubber Exhibits.

The Report of the Committee submitted to the Chairman of the U. P. A. S. I., and read during the Meeting, was as follows :—

“In accordance with your instructions, we have inspected the exhibits of rubber at the U. P. A. S. I. offices, sent in by different members of the District Associations.

“Samples of Rubber were received from :—The Central Travancore, Teekoy, Travancore, Cochin, and Kerala Rubber Cos., and the Eldorado and Boyce Estates.

“All are such excellent examples of our Rubber Industry, and care in curing, that we have found it difficult, if not invidious, to commend one above the others.

“There are two grades especially shown, Smoked Sheet and Pale Crepe. Of the former, we consider that sent by Teekoy is the best, the exhibit by South India Rubber Company being not quite so even. A very excellent sample from Kerala was only excluded from being bracketed in first place, owing to the edges having been trimmed.

“As regards the Pale Crepe, the first place rests between the examples sent from the Boyce Estate and that from the Travancore Rubber Company, the difference being so extremely slight that we are unable to differentiate between them.”

The CHAIRMAN moved a hearty vote of thanks to the Committee for kindly taking the trouble they had done in reporting on the Rubber Exhibits. The exhibition had not had all the support it should have had. He had hoped that there would have been as good a show as there had been in previous years. The reason for the falling off in interest and in exhibits was due, it had been suggested, to the fact that no notice of any kind was taken of the exhibits. He trusted that the present Report would lead to more competition in the future.

A South India Planters' War Fund.

Mr. MURPHY (Mundakayam) proposed the inauguration of a Planters' War Fund, and in doing so, said :—

In the full belief that I shall at length meet with the cordial approval and sympathy of the Meeting, I propose that a fund, to be known as the Southern India Planters' War Fund, be established, for the purpose of helping, when required, planters who have joined the army. If you

would like to amend this, and also allow members of West Coast Mercantile Firms to benefit by the fund, I should be very pleased to accept your amendment. It may be that some of you think that there are already sufficient funds in existence, but a little reflection will, I feel convinced, make you admit the special claim of this fund. The men for whom I appeal are our fellow-planters, who gave up their billets to help our country and to help us. When I say "our country," I mean England, Scotland, Ireland and the Colonies, for, so far as this war is concerned, I am, as an Irishman, proud to think that the one word covers them all. The majority of these men were Assistants, drawing small salaries. Some of them had difficulty in paying their passages Home. Others, who joined the army in India, had, I know as an absolute fact, difficulty in paying their rail journey to the north. Now, what will the position of these men be after the war, unless we are prepared to help them, and, above all, should we not be prepared to help those of our men who, by cruel fortune of war, may be wounded and disabled for life?

This will not be generous of us ; it will be our duty, and men accepting assistance will not be accepting charity, but will be relieving us of a portion, a very small portion, of the debt we owe them. It may be said—in fact, it has been said to me—that as it is a long way to Tipperary, a long way to the end of the War, there is no urgent need for this fund. I do not agree with this opinion. Now as I speak, some of these brave planters are probably under fire, and may at any moment fall wounded, blinded perhaps, or otherwise disabled for life, the help they are so clearly entitled to should not be for a day delayed. Recently, I read in a Home Magazine a most interesting article on recruiting posters, and the words on one poster made a great impression on me. I now repeat them :—"You're proud of your pals in the army, of course ; but what do your pals think of you?" Now our pals know that we cannot all join the army ; they know that estates cannot be left to look after themselves, they know of one man that he is too old, of another that he is not medically fit, or has perhaps a mother or a sister to support. We need not fear that our friends will think us cowards or slackers. But this is not enough ; we should also show them how thoroughly we appreciate their patriotism, how thoroughly we recognise the great claim they have on us.

I do not propose to enter into detail now as to how this fund should be worked. I leave this to be settled in Committee.

I think that the organisation of the Benevolent Fund should be used so as to save expense, and that an agent at Home should be sent some money at once, so that men may obtain temporary help immediately it is required. To make this fund a success, a very large sum of money must be collected. If the total does not top what has been collected to date for the Benevolent Fund I shall be much disappointed. I shall also be disappointed if the most junior assistant does not subscribe, it may be in five or more instalments, at least Rs. 75. If to do this he has to deprive himself for a time of his cigarettes, and of his modest evening peg, can anyone say I ask too much? Let us not for a moment forget that these men, these brave men, of whom we should all be proud, at the call of duty are offering their lives for the honour and safety of the Empire, and, while we remain here in tranquil security, are defending against a powerful, unscrupulous and brutal enemy, our country, our homes and our people. (Applause.)

Mr. DANVERS (North Mysore) in seconding the Resolution said he would like to add his tribute of gratitude to that so eloquently expressed by Mr. Murphy to those who had gone to fight for their king and country. They had done not only their duty, but had honoured the community.

In Committee Mr. Murphy suggested that they might use the Benevolent Fund organisation for the collection of the money. He would also suggest the appointment of agents at Home to whom men could go as soon as possible to secure the assistance they needed. He would suggest the names of retired planters like Mr. H. M. Knight and Mr. Bannatine for this purpose.

The CHAIRMAN said that he would like to make a suggestion in regard to what Mr. Murphy had just said. He would suggest that they should ask their representative in London to act as Secretary and Treasurer of the Fund and for a Committee of South India planters now retired at Home to act as a Committee such as Mr. Knight, Mr. Bannatine, Mr. Acworth, Mr. Hodgson, Mr. Romilly and Mr. Harris. Several of them lived near London and a *quorum* of three would be sufficient to transact business.

Mr. BROWNE (North Mysore).—Is it proposed to remit the whole of the money Home? Some of our men have enlisted in the regiment at Bangalore and have gone to East Africa. They ought to have provision made for them out here.

Mr. MURPHY.—No. I only meant that a small sum should be remitted Home to assist men as a temporary measure. We should use the machinery of the Benevolent Fund out here. I am quite sure that Mr. Norton is very willing to assist.

Mr. BROWNE said that the fund would be treated in the same way as the Benevolent Fund. In his district there were many who did not subscribe to the Benevolent Fund. How were they going to get at these men. He thought District Associations ought to make an appeal to every planter irrespective of whether he was a member of the Association or not.

Mr. DANVERS.—Certainly. This is not to an Association, but, a Planters' Fund.

Mr. MALCOLM (Wynaad) said that planters might be allowed to make monthly subscriptions for the duration of the War. This would allow money to be paid in instalments by those who could not pay a lump sum.

Mr. BROWNE said that the only other suggestion that he had to make was that District Associations should be approached on the subject and for this purpose he would suggest that Mr. Murphy's eloquent speech should be printed and distributed with the appeals so that it could be read by everybody. He was quite sure that nobody could read that speech without being deeply moved.

After some further discussion regarding the inclusion of members of West Coast firms in the benefits to be secured from the fund, the following Resolutions were passed in open Meeting :—

TOTAL RS... 11,280 0 0

A Planters' Aeroplane Fund.

Mr. G. R. PEARSE (Coorg) proposed the following Resolution :—

“ That this Meeting approves co-operating with the Overseas Club in view to supplying aircraft for the War and would ask the Executive Committee of the U. P. A. S. I. to assist the planting districts by receiving and forwarding subscriptions as collected.”

In doing so he said :—

Mr. CHAIRMAN & GENTLEMEN, I have much pleasure in calling your attention to the appeal made in June last by the Over-Seas Club, with the approval of the Army Council, for an Imperial Aircraft Flotilla, the idea being that each aeroplane be named after the district that provided it.

It has been brought home to us all since the beginning of the War how vitally important aircrafts have proved and how that importance is daily increasing. As I daresay many of you are aware the chief objects of the Over-Seas Club, which is under the patronage of His Majesty the King, is to draw together in the bond of comradeship British people in all parts of the world and to point out to them how best their individual service can be applied towards maintaining our Empire's supremacy.

The Aeroplanes required are of two kinds only, costing each £2,250 and £1,500 respectively, and I understand they are ready to be supplied at very short notice. The Royal Flying Corps is ready also to receive and man them.

I know, Gentlemen, that all are liberally, according to their means, assisting the various funds that this great War has called into being ; but I know also that amongst those who for one reason or another are unable to respond to their country's call to arms, there are many who, in spite of the fact that they have taken on their shoulders, for the duration of the War, burdens considerably heavier than what they have hitherto been accustomed to, yet feel that they could do and sacrifice more if they had the opportunity, and who feel moreover, that their greatest endeavours to do their little bit out here can be as nothing in comparison with the strenuous efforts of those actually fighting for their Country's life, and incidentally, laying down their own—Gentlemen: I would put it to you that this is one of our opportunities. Let us assist in the purchase of aircraft and have them handed over to the Flying Corps with all speed. I would ask each delegate here to accept the role of canvasser in his district, and I would suggest that these subscriptions when collected be sent to the Secretary of the U. P. A. to be forwarded on by him to the Over-seas Club as from the planting districts of South India. I would not however limit subscribers to planters only.

Mr. B. MALCOLM (Wynaad) seconded the Resolution.

Mr. MURPHY (Mundakayam) suggested that the opening of another fund might militate against the fund that they just resolved to form. One of the ideas contemplated in bringing his proposal was to stop a lot of other funds being started and diverting into various channels the funds available for philanthropic purposes. He did not think that there was enough money available to meet fully the requirements of all these funds,

Mr. LEE (Kanan Devan) agreed with Mr. Murphy that if they started half-a-dozen funds, none of them would meet with much support.

Mr. P. G. TIRIPING (Coorg) said that the fund just started was for the benefit of planters. The Aeroplane Fund came under another category altogether. It was a fund for furthering the interests of the Empire generally.

The Hon'ble Mr. BARBER, said that the Resolution, it appeared to him, had been brought forward at an unfavourable moment. It was unlikely that they would be able to get all the money they required for both the Planters' War Fund and the Aeroplane Fund. He suggested that in connection with the latter fund, they should collect such sums as they could and send the amount to some such fund as that which was being organized in Madras by the *Madras Mail*.

Mr. MURPHY proposed the following amendment to Mr. Pearse' Resolution: "That no official subscription list for an Aeroplane Fund be circulated, but that delegates be asked to send to the *Madras Mail* any sums that they can afford."

The amendment was first put to the vote and was lost. The original resolution was then carried.

Election of Office Bearers.

After some discussion in Committee regarding the accounts and the appointing of an Auditor, the Meeting proceeded to the election of Office-bearers, the Chairman adopting a system of separate voting for the Chairman and Vice-Chairmen, suggested by Mr. Simcock on behalf of his Association.

A Vote of Thanks to the Planting Member.

The CHAIRMAN said: Our Planting Member's time of service is up next April, and I am not altogether clear whether we can nominate him for re-election at this Meeting or not, but in any case I think it is quite superfluous for me to say that we hope and trust he will continue to represent our industry on the Madras Council for many years to come. What Mr Barber has done for us few can realise, but those of us who have been in close touch with the working of the Association have some idea. He has spared no trouble where the interests of our Association were concerned, no matter how trivial the subject was. Our Labour Department was in a great measure due to his exertions, and I doubt whether our Scientific Scheme would have developed as it has had it not been for our planting member. I wish to ask you, Gentlemen, to give the Hon'ble Mr. Barber a very hearty vote of thanks for the work he has done on our behalf, and also express our hope that he will stand again for re-election when the time comes.

Mr. Barber's Acknowledgment.

The Hon'ble Mr. BARBER.—I must thank you, Mr. Chairman, for what you have said about me, and you, Gentlemen, for the kindly spirit in which it has been received. I would specially like to include Mr. Murphy, because his hearty acceptance of the Resolutions shows that there has been no bitterness about this Meeting.

Result of the Election.

The ballot was then taken for the election of office-bearers for 1915-16 and resulted as follows:—*Chairman*—Mr. C. H. Browne; *Vice-Chairmen*—Messrs. Waddington and Nicolls. Mr. Richardson was elected to the Control Committee of the Labour Department.

Mr. C. H. BROWNE said: Mr. Chairman, I am sensible of the great honour that has been done me in electing me to be your Chairman for the coming year. When I came here I had not the least idea that I was going to have this honour thrust on me. I feel conscious of many shortcomings when I have to follow in the footsteps of such an able and energetic Chairman as you have had in the past year and I don't suppose for a moment that I will be able to carry on the work as he has carried it on. The only thing I can say is that I will do the work to the best of my ability.

Mr. WADDINGTON thanked the Meeting for the honour done him. Any diffidence that he felt was assuaged by the knowledge that Mr. Browne would be doing all the work.

Mr. NICOLLS also thanked the Meeting for the honour done him. With Mr. Browne as Chairman, he felt that he would have nothing to do.

Vote of Thanks to the Chairman.

Mr. C. DANVERS (North Mysore) said: In proposing a vote of thanks to the Chairman, there is little need to point out what he has done and equally little need to say how appreciative we all are of his services to our Association during this year. The crisis caused by the War was met by him in the most prompt and effective manner, and his labours in the usual routine of work have been heavy. It has been a strenuous year of work, with the starting of the Labour Department, and both tact and close application to our wants have been needed and have been supplied. (Applause.)

Mr. J. J. MURPHY (Mundakayam), in seconding, said: I ask permission to associate my District's name with this vote of thanks to Mr. Richardson. Personally, I am much obliged to him for the fair and courteous treatment that he has given me. Mr. Richardson is a Peermade man, but Mundakayam also claims and is proud of him. He and I, as most of you know do not always see eye to eye on business matters, but we remain good friends and will, I hope, continue so for at least another fifty years, when it will be up to him to show me how to tune my harp in the home of eternal bliss.

THE CHAIRMAN'S CLOSING SPEECH.

The CHAIRMAN then made the following closing speech:—

GENTLEMEN,—I am greatly obliged to Mr. Danvers and Mr. Murphy and to you all for the very hearty vote of thanks you have accorded me for my work as Chairman during the past year. It is the second time I have acted as your Chairman, and I assure you I count it as no small honour, more especially as during the year I had to carry on from its inception what I consider one of the greatest events in the history of the U. P. A. S. I., namely, the Labour Department, and during the present year we have taken another most important step

in the re-organisation of the Scientific Department, which, I trust, in a few years will be equal to anything in the east. I would just like to touch on one or two subjects that have come up for discussion during this Meeting and I must first of all congratulate the Association on the decision they have come to over the Scientific scheme. The opinion throughout has been unanimous, and I think it shows that the planters of Southern India are rapidly realising the importance of a thoroughly up-to-date Scientific Department. Ceylon has always been a subject of envy in this matter, and on many occasions has been brought up as an object-lesson to South India. The result of our Meeting this year proves that we are determined to have an equally good Scientific Department of our own.

The Labour Department, on the other hand, has made a good start but I am sorry to say has not met with the unanimous support accorded to the scientific scheme. This, I know, is only to be expected, as I am quite aware there are many Estates and some Districts which are not in need of help from this organisation. Exception has been taken to some opinions expressed under this heading, but, as has been very ably pointed out by others in this room, the accusations, if you can call them such, were more general and the outcome of, to a great extent, hearsay report which it is almost impossible to stifle, where you have a large area to deal with, such as the whole planting districts of South India. A little plain speaking oftentimes clears the air, and brings about an understanding, where all sorts of misconceptions existed, and I am perfectly sure that anything said at this Meeting was not said with any animosity against any particular Association. We are quite prepared for and ask for criticism, as by criticism we can correct our mistakes and guard against them in future, and I hope the discussions that have taken place have raised no hostile feeling among members assembled here, as this, of all things, is what we wish to avoid.

As regards subscriptions to the Labour Department, we have to congratulate ourselves on the way in which subscriptions have been paid for the last year, in spite of the War, and this leaves us in no doubt as to the outcome of the current and subsequent years. It must be remembered that although we show a considerable balance in hand on last year's work, this was due entirely to the Department only taking form late in the year. We now have a good many Agencies established, and money will be required regularly to meet the current expenditure during the year, and I do not wish the subscribers to get the idea that we are flush of funds, and make it an excuse for delaying payment of subscriptions. It will considerably hamper the working of the Department if these do not come in up to date, and I ask you, Gentlemen, to give this your careful consideration.

Under the heading of roads and communications, several railway schemes have been put before the Meeting, and although we are quite aware this is, perhaps, not the time to ask the Government for expenditure on these items, we have brought them forward in the hope that when the political state of affairs assumes a brighter outlook they will be taken in hand. The Cochin Harbour scheme is one which seems to affect a very large number of our planting districts. In connection with this, the proposal to establish a produce market in Cochin seems a very important step, and one which would have a considerable bearing on the proposed scheme.

In my opening remarks I also referred to the Benevolent Fund, which, as I said, has a very special call on us at this time. Mr. Danvers has ably dealt with this in his appeal, and it requires no addition from me. I am quite aware that this is a time when there are many calls on us, but this fund interests us directly, and deserves our united support. I would also like to make mention of our Vice-Chairmen Mr. Brock and Mr. Graham. You will remember Mr. Brock's letter, which I read at the opening of the Meeting, which showed that his thoughts are with us, the other Vice-Chairman, Mr. Graham, is now in the fighting line in France, and both are doing their duty for their King and country.

In conclusion, Gentlemen, I can only once again thank you for the hearty co-operation you have one and all extended to me during the Meeting, and I can assure you that the work of the Association, whether I be out here or at Home, will always be of the greatest interest to me.

ACCOUNTS, 1914-1915.

LABOUR DEPARTMENT.

Dr" Income and Expenditure Account for the year ending 30th June, 1915. Cr.

	RS. A. P.	RS. A. P.	RS. A. P.
To Initial Expenses ...	2,647 11 6		
" Paid to Labour Department...	133,938 10 5		
" Expenditure by Secretary, U. P. A. S. I. ..	1,300 9 4		
		137,886 15 3	
" Balance unspent carried over to balance sheet ...	..	58,851 12 3	
Total Rs...	...	196,738 11 6	
		Total Rs..	196,738 11 6
		By Subscription 1914-15 ...	196,236 4 0
		" Interest, Labour Department ..	502 7 6

Balance Sheet for the year ending 30th June, 1915.

LIABILITIES.				ASSETS.			
	RS.	A.	P.		RS.	A.	P.
Kalisynidicate Manurial Experiment Fund ...	...	...	...	<i>Furniture—</i>	1,709	6	0
Planters' Benevolent Fund ...	...	...	...	Office Furniture and Fittings Purchased during the year ...	95	12	0
Scientific Assistant (Mysore) Fund—					1,805	2	0
General Fund ...	1,725	8	3	Laboratory Fittings ...	1,110	0	0
Laboratory Fund ...	388	0	4		2,915	2	0
Labour Department ...	...	...	...	Less depreciation at 10 ^o /o ...	291	8	2
Experiment Plot Fund ...	...	...	...		30	0	0
Audit Fee for 1914-15 ...	...	...	...	<i>Outstandings—</i>	55	4	0
Amount received for Bulletins.	...	...	...	Ex-Chairmen's subscriptions Due by Subscribers ...	...	...	...
Capital Fund—	15,705	13	11	Assistant Chemist Fund ...	...	...	...
On 30th June, 1914	...	...	...	<i>Labour Department—</i>	36,370	12	9
Balance of Income and Expenditure Account ...	789	6	9	Mercantile Bank No. 3 Account ...	22,480	15	6
				*Outstandings ...	...	...	...
				<i>Investment—</i>	...	...	...
				Fixed deposit in the National Bank...	...	...	...
				<i>Planters' Benevolent Fund—</i>	...	...	...
				Mercantile Bank No. 2 Account ...	...	...	...
				<i>Cash—</i>	...	...	...
				Mercantile Bank of India No. 1 Account ...	16,334	7	11
				With Secretary ...	40	9	7
Total Rs....	...	...	...	Total Rs....	...	...	...
					83,364	1	10

*Of this amount Rs. 19,424-15-6 has since been collected.

I beg to report that I have examined and compared the above Balance Sheet with the books, Accounts and vouchers relating thereto and in my opinion, the said Balance Sheet is in conformity with the law and is properly drawn up so as to exhibit a true and correct view of the Association's affairs according to the best of my information and the explanations given me and as shown by the books of the Association. I have obtained all the information and explanations I have required. I certify that I have complied with the requirements of Section 144 of the Indian Companies' Act VII of 1913.

BANGALORE, 14th August, 1915.

(Signed) W. H. HALDWELL, Auditor.
F. NORTON, Secretary.

Dr. South Indian Planters' Benevolent Fund. Cr.

To Assistance granted—		RS. A. P.	RS. A. P.		RS. A. P.
Mr. Russell	...	410 0 0		By Balance brought forward from last year.	1,712 0 2
" Morrison	...	200 0 0		" Subscriptions collected	1,955 0 0
" Claridge	...	200 0 0		" Interest	631 4 4
" Inray's Children	...	150 0 0			
Mrs. Scott	...	500 0 0	1,460 0 0		
Mr. Renouf's advance written off	...	...	100 8 0		
" Printing	...	...	55 7 0		
" Discount on cheques	...	...	0 4 0		
" Balance	...	...	2,682 1 6		
		Total Rs....	4,298 4 6	Total Rs....	4,298 4 6

Dr. Planters' Chronicle. Cr.

	RS. A. P.	RS. A. P.
To Printing charges and postages	3,130 0 0	
" Typist's salary	180 0 0	167 3 0
" Telegrams	0 10 6	5,039 15 6
" Managing Editor— $\frac{1}{4}$ share of profits	948 4 0	
" U. P. A. — $\frac{1}{4}$ share of profits	948 4 0	
Total Rs....	5,207 2 6	Total Rs.... 5,207 2 6

Cr.

Scientific Assistant (Mysore) Fund.

Dr.

	RS.	A.	P.		RS.	A.	P.	
To Mr. Frattini's Salary	...	4,587	8	0	By Balance brought forward from last year ...	518	15	11
" " Allowance	...	300	0	0	" Subscriptions from Bababudin Planters' Association	1,620	0	0
" " Peon	...	120	0	0	" Subscriptions from South Mysore Planters' Association	1,950	0	0
" Laboratory Fund	...	527	5	2	" Subscriptions from North Mysore Planters' Association	3,375	0	0
" Printing	...	34	0	0	" Subscriptions from Messrs. Morgan & Son.	50	0	0
" Mr. Frattini's Travelling Expenses	...	60	0	0	" Subscriptions from Messrs. Peirce, Leslie & Co. ...	50	0	0
" Postages	...	14	6	6	" Subscriptions from Messrs. P. F. X. Saldanha & Sons	50	0	0
" Library	...	42	15	0	" Subscriptions from Mr. A. J. Saldanha	50	0	0
" Insecticides	...	48	5	0	" Subscriptions from Messrs. Killick Nixon & Co.	50	0	0
" Stationery	...	11	10	0				
" Rent	...	120	0	0				
" Sprayers	...	122	6	0				
" Balance...	...	1,725	8	3				
Total Rs...		7,713	15	11	Total Rs...	7,713	15	11

Cr.

Kalisyndicate Manurial Experiment Fund.

Dr.

				RS.	A.	P.					
To Messrs. Parry & Co., for Manures supplied				...	667	7	6	By Balance brought forward from last year ...			
" Balance				...	2,930	12	10				
Total Rs....					3,598	4	4	Total Rs....			
								3,598	4	4	

APPENDIX.

APPENDIX.

RULES OF THE U. P. A. S. I. (Incorporated).

(As revised at the Annual General Meeting, 1915).

- I. (a) That voting be by the elected delegates of each District Association.
- (b) That every District Association be assessed at the rate of 2 annas per acre on the area under cultivation represented by Members of the Association. That a vote shall be given for every Rs. 10 subscribed.
- (c) That each District Association declare at the Annual Meeting of this Association the area on which the assessment is to be calculated for the ensuing year.
- II. That the Annual General Meeting shall be held at Bangalore during the months of July or August in each year.
 - (1) That 'at least three subsidiary Sectional Meetings at convenient centres be held in addition each year to deal mainly with coffee, tea and rubber, respectively.
 - (2) That these Sectional Meetings devote special attention to the purely agricultural aspect of the planting industries by means of lectures, exhibitions and discussions.
 - (3) That all Resolutions passed at these Sectional Meetings shall be forwarded to the U. P. A. S. I. to be reconsidered at the Annual Meeting of that body and that such Resolutions shall not become in any way binding upon the U. P. A. S. I. unless re-affirmed at an Annual Meeting.
 - (4) That the Secretary of the U. P. A. S. I. be hereby empowered and instructed to approach the Honorary Secretaries of the District Planters' Associations with a view to making the necessary arrangements for holding such Sectional Meetings during the ensuing year, and in future years; that he shall attend all such Meetings, if possible; and that a travelling allowance be granted him for this purpose, of a double first-class railway fare and Rs. 5 halting allowance.
- III. That a quorum of four Members shall suffice for the transaction of business by the Council.
- IV. That the expenses of the delegates to any Meeting of the Council convened under Article 24 be defrayed by the Association.
- V. That in all Meetings and in the conduct of business by the Council the system of voting be on the subscription basis of one vote for every Rs. 10 subscribed and that the Chairman, Vice-Chairmen, Planting Member and the ex-Chairman of the previous year shall have one vote.

That the Scientific Officer shall be permitted to move Resolutions at Meetings, but shall have no vote.

VI. That the Council shall have power to appoint the Chairman, two Vice-Chairmen and Secretary, should any of the offices become vacant during their term of office.

That should a vacancy occur in either of the appointments, of Vice-Chairman during any financial year at any time greater than one month from the expiry thereof, the Council shall elect one of their number to fill such vacancy.

VII. That ex-Chairmen, ex-Vice-Chairmen and ex-Planting Members of Council may be allowed to attend Meetings to propose Resolutions or amendments, and to vote, having one vote each and do in that case pay an annual subscription of Rs. 15; and that while in India they be entitled also to receive the circulars of the Association upon intimating their wish to the Secretary.

That delegates of the previous year be admitted in like manner for one year only.

VIII. All questions in which the Association is interested shall be determined at the Annual Meeting, and after such Meeting the general business of the Association shall be conducted, *ad interim* by the Chairman, Council and Secretary and their actions shall be submitted for confirmation at the next Annual Meeting.

IX. Proxies sent to the Secretary one fortnight before an Ordinary General Meeting shall be accepted, and Proxies sent to the Secretary one week before the Extraordinary General Meeting shall be accepted. In both cases they shall be properly stamped and shall state clearly the purpose for which they are given. (*Vide* Form of Proxy given below).

X. Any Member having an original proposition to propose shall give notice to the Secretary in time to allow him to give 30 days' notice before the assembling of any Meeting and no subject shall be discussed without such notice, except with the unanimous consent of the Meeting.

XI. (1) That the Finance Committee consist of not more than five members, namely, the Chairman, Vice-Chairmen, and Planting Member and the Chairman or the Vice-Chairman of the previous year. That the Secretary be the Secretary to the Finance Committee.

(2) That it is understood that the Finance Committee has direct executive control in all matters concerning finance or connected therewith.

FORM OF PROXY.

The Proxy authorises.....to vote for me at the Meeting of the U. P. A. S. I. to be held on... ..and any adjournment thereof on the Resolution relating to.....and on any amendment that may arise therefrom.

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